UNIT 6 EVOLUTION OF EXTENSION MODELS

Structure

6.0 Introduction

6.1 Objectives

6.2 An Overview of Organisational Streams of Extension

- 6.2.1 Linkage between Extension Goals and Models

6.3 First-line Extension Model

- 6.3.1 All India Coordinated Project on National Demonstrations
- 6.3.2 Operational Research Project
- 6.3.3 Krishi Vigyan Kendra (Farm Science Centre)
- 6.3.4 Lab-to-Land Programme

6.4 Conventional Model – Top-Down Model

- 6.4.1 Ministry-based General Extension Model
  - 6.4.1.1 Strengthening and Re-organisation of Agricultural Extension Administration in the States: Training and Visit (T & V) Extension

6.5 Universities Extension Model

- 6.5.1 Agricultural Universities: Extension Role and Set-up
- 6.5.2 Extension Education Institutes: Integration with Agricultural University System of the States
- 6.5.3 National Institute of Agricultural Extension Management
- 6.5.4 District Agricultural Advisory and Transfer of Technology Centres (DAATTCs)
- 6.5.5 Krishi Vigyan Kendra (KVKs): Technology Assessment and Refinemet
- 6.5.6 Agricultural Information and Communication Centre (AI & CC)
- 6.5.7 Agricultural Technology Information Centre (ATIC)
- 6.5.8 Call Centres
- 6.5.9 Extension through Distance Education Institutions / Open Universities

6.6 Community Model or Community-driven Model

- 6.6.1 Agricultural Technology Management Agency (ATMA)
- 6.6.2 Rashtriya Krishi Vikas Yojana (RKVY)
- 6.6.3 Farmers' Organisations, Federations and Linkages
  - 6.6.3.1 Types of Farmers' Organsiations
  - 6.6.3.2 Research-Extension-Farmer-Market Linkages: Types and Reasons for Failure

6.7 Integrated Model – Public-Private Partnership Model

- 6.7.1 Types of Public-Private Partnership: Need and Nature of Relationships
  - 6.7.1.1 Need for Public-private partnership
  - 6.7.1.2 Types of Public-private Partnership and Nature of Relationship
- 6.7.2 Some Cases/Examples of Public-Private Partnership
  - 6.7.2.1 Excel-Farmers Partnership
  - 6.7.2.2 Excel-Parle-Farmers Partnership
  - 6.7.2.3 Uttam Bandhan – A Quality Bond of Partnership
  - 6.7.2.4 Joint Forest Management Programme

6.8 Let Us Sum Up

6.9 Answers to 'Check Your Progress' Questions

6.10 References

6.0 INTRODUCTION

In Block 1 of this course we have introduced you to extension education and development highlighting the concept, principles, philosophy and historical development of extension education in India as well as the concept, dimensions and factors of development, among other things. If you revisit Unit 2 of Block 1, you can recall the comprehensive picture of different programmes of extension launched since the pre-independence era (1866-19470) to till date.

Now, in the present Unit (i.e. Unit 6 of Block 2), the course of our discussion will be on the overall efforts of major agencies that were/have been involved in extension system which together present a variety of extension models. It also presents the picture of evolution of the extension models in India. In nutshell, we attempt to present an overview of organisational streams of extension and discuss different models of extension along with some relevant case studies, schemes and projects.

6.1 OBJECTIVES

After going through this Unit, we expect you to be able to:

- Describe different organizational streams of extension work of agriculture and rural development;
- Discuss different models of extension in their holistic perspective;
- Appreciate the evolutionary trend in these models by anlysing the relative advantages and disadvantages of these models.
- Recognise the importance of public-private partnership and the role played by different partners by examining certain case studies.

6.2 AN OVERVIEW OF ORGANISATIONAL STREAMS OF EXTENSION

In this section, we will present you an overview of different organizational streams of extension work for agriculture and rural development.

According to Prasad, Choudhary and Nayar (1987), there are four organizational streams that cover extension work of agriculture and rural development. These include the following.

1) The first-line extension system, comprising mainly the Indian Council of Agricultural Research (ICAR) Institutes and the Agricultural Universities.
2) Extension system of the Ministry of Agriculture and the State Departments of Agriculture.
3) Extension system of the Ministry of Rural Development and the State Development Departments.
4) Development work by the Non-Government Organizations (NGOs), business houses, etc.

Nevertheless, we can combine streams 2) and 3) mentioned above into one stream as the "extension system of the Ministries comprising the system of the Ministry of Agriculture and the State Departments of Agriculture as well as of the Ministry of Rural Development and the State Development Departments". Thus, they can conveniently be considered as three broad streams.

i) In the *first-line extension system*, the ICAR Institutes and the Agricultural Universities play a major role through organizing demonstrations, training, etc., on a limited scale, and are forceful enough to have a catalytic influence on other extension systems and sub-systems.

ii) The main agency for agricultural development work is the Ministry of Agriculture at the national level and the Departments of Agriculture at the State level. Further, the extension work of the Ministry of Rural Development also embraces over 60 percent of agricultural activities. Though there may be some procedural variations, their extension approach is not basically different from that of the State Departments of Agriculture.

iii) Development work by the voluntary organizations, the Non-Government organizations, constitute another major part of the extension work. However, they mainly implement the projects funded by the ICAR, State Departments of Agriculture and State Development Departments. They work as per guidelines of each project. Fund is a limitation for them, and they try to obtain it as donations from different sources inside and/or outside the country. While all the voluntary organizations (NGOs) may not be equally effective, some of them are well known for their dedication to serve the people. The business houses, manufacturers of agricultural inputs, etc., have also been contributing to the rural development and agricultural extension work. The business houses take up rural development work mainly to create a goodwill and to get the satisfaction of serving the people. The main concern in extension work of the input manufacturers is to promote the sale of their products, but in the interest or for the benefit of people. However, some organizations emphasize total development of the farmers in their operational area through training, demonstration and various other extension activities.

An outline of the agricultural extension organization in India is presented in Figure 6.1.

You have already studied the overall development of extension in India in Unit-2 (of Block-1) divided into four stages viz. i) Pre-independence era (1866-1947), ii) Post Independence era (1947-1953), iii) Community Development and National Extension Service era (1953-1960), and Intensive Agricultural Development era (1960-till date). So, you can revisit Unit-2 to refresh your memory about different programmes/schemes under each of these eras. Thus, you can recall that, though agricultural development work in India had its beginning in the 1860's, extension as a nation-wide organisation aimed at the integrated development of rural India is of relatively recent origin (1952-53) and has undergone different changes over time.

With such an overview of organizational streams, we now wish to present the broad goals and approaches of extension, an understanding of which will make our discussion later on different models of extension easier and comfortable.

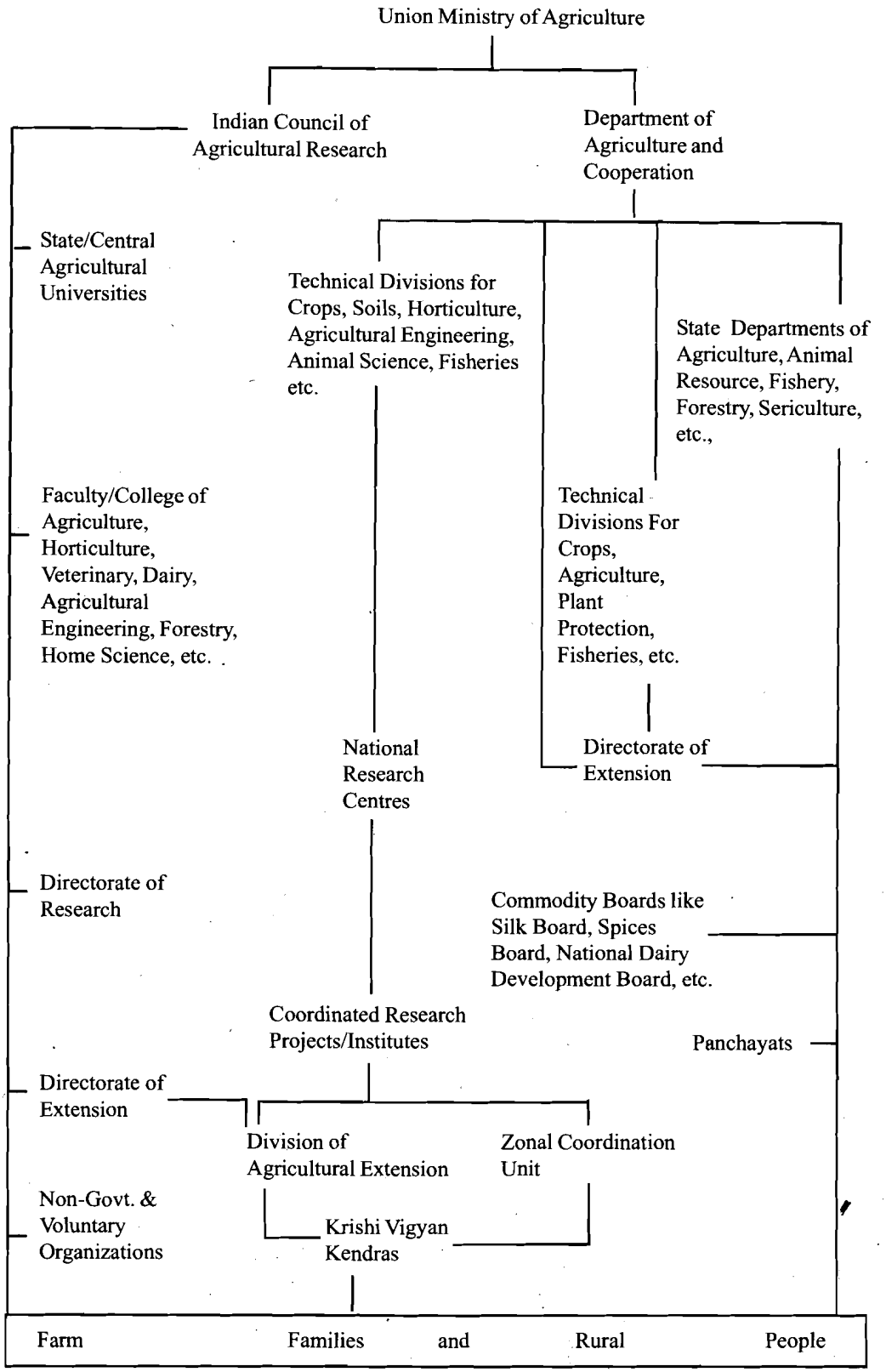
Union Ministry of Agriculture
Indian Council of Agricultural Research
Department of Agriculture and Cooperation
State/Central Agricultural Universities
Technical Divisions for Crops, Soils, Horticulture, Agricultural Engineering, Animal Science, Fisheries etc.
State Departments of Agriculture, Animal Resource, Fishery, Forestry, Sericulture, etc.,
Faculty/College of Agriculture, Horticulture, Veterinary, Dairy, Agricultural Engineering, Forestry, Home Science, etc.
Technical Divisions For Crops, Agriculture, Plant Protection, Fisheries, etc.
National Research Centres
Directorate of Extension
Directorate of Research
Commodity Boards like Silk Board, Spices Board, National Dairy Development Board, etc.
Coordinated Research Projects/Institutes
Panchayats
Directorate of Extension
Division of Agricultural Extension
Zonal Coordination Unit
Non-Govt. & Voluntary Organizations
Krishi Vigyan Kendras
Farm Families and Rural People

Figure 6.1: Agricultural Extension Organization in India

6.2.1 Linkage between Extension Goals and Models

Main actors within the extension system are the members of rural communities, extension and other development personnel, researchers, and staff of commercial or public service and support organizations. Empirical evidence shows a variety of forms in which interaction among these groups is institutionalized. The variety

of forms suggests a similar variety of goals, and could also be used to classify extension approaches. In practice, however, one finds an almost inseparable mixture of goals inhibiting a clear-cut classification. It seems more appropriate, then, to use a broader category, namely, selectivity with regard to clientele, and treat the respective goals as a continuum. The two end points of this continuum of goals would be marked as technology transfer and human resource development, suggesting either a rather narrow technical or a broader socioeconomic view of development (Uwe Jens Nagel, See http://www.fao.org/docrep/W5830E/ w5830e04.htm).

- *Technology Transfer:* For decades the research-extension-farmer linkage, especially in developing countries, was based on a rather simple model. In order to achieve development, "modem" research results had to be transferred to the "traditional" farmer, and extension seemed to be the appropriate means to do so. The general faith in science and the commitment to modernization led to discrediting indigenous knowledge. Although this view is still held by many administrators, researchers, and extension agents, it is now being seriously questioned. Farming systems research and the "rediscovery" of farmers' knowledge (Chambers, Pacey, & Thrupp, 1989) have shown that "improved technology is a package of inputs and practices that usually comes from many sources" (UNDP, 1991, p.2).

- *Human Resource Development:* The concept of human resource development is much broader than that of technology transfer, though both are closely interrelated. Increasing complexity not only of technology but also of the life situation of farmers even in remote areas demands new skills. With the help of these skills including literacy and education, rural women and men "acquire a better insight into the network of problems and recognize the alternative solutions available" (Albrecht, et al., 1989, p.34).

Extension may substitute over a certain period of activities such as vocational education that are not yet in place, but more important will be the teaching of managerial and organizational skills that will enable farmers to increasingly solve their own problems. Human resource development thus aims at what may be called "critical competence." One important task of any extension system will therefore be to extend human resource development to underprivileged groups — women, rural youth, and farmers, generally small farmers in remote areas — with less access to formal or vocational education.

Alternative ways of organizing extension: The success of an agricultural extension programme or model tends to be directly related to the extent to which its approach fits the programme goals for which it was established (Axinn, 1988, p.135). The alternatives to organizing extension demand choices on various levels:

- Public versus private.
- Government versus non-government.
- Top-down (bureaucratic) versus bottom-up (participatory).
- Profit versus non-profit.
- Free versus cost-recovery.
- General versus sector.

- Multi-purpose versus single-purpose.
- Technology-driven versus need-oriented.

In practice, extension organizations everywhere pursue the overall goals of technology transfer and human resource development, though the emphasis will differ. Within each organization there is a mix of objectives, and within countries there is often a mix of organizational patterns. The above mentioned approaches are followed in different models of extension work depending upon their suitability to the given context. In the sections that follow, we will focus on different models of extension with emphasis on the trend in their evolution.

Since the first-line extension system assumes greater significance due to their pioneering role in early extension efforts and their effects on other national systems/streams of extension we will highlight first-line extension system model below.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

1) What are the broad organizational streams of extension?

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2) What are the two ends of the continuum of goals of extension?

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6.3 FIRST-LINE EXTENSION SYSTEM MODEL

Realizing the scope and importance of integrated working of interrelationship between research, education and extension functions, the ICAR established a Section of Extension Education at its headquarters in 1971, which was later on strengthened and renamed as Division of Agricultural Extension. It was intended to enforce this functional relationship down the line in the research institutes, agricultural universities and allied institutions and through them directly to the intended beneficiaries. Thus, the projects undertaken or promoted by them are of first-line extension type.

The first-line extension projects are designed and developed to serve the following specific objectives (Prasad, Choudhary and Nayar, 1987):

1) Organizing first-line demonstration by scientists to show the maximum genetic production potentiality of latest agricultural technologies to farmers and extension functionaries without loss of time.

2) Organizing extension programmes in selected/limited areas, specially around institutions and their stations/sub-stations, to serve as extension laboratories for field training and teaching programmes.

3) Involving large number of scientists in the field work through these projects for rapid feedback for improving research and educational programmes.

4) Testing technologies in field conditions.

5) Developing appropriate extension approaches and methodology for field work.

6) Serving the farming community by helping them to increase production and productivity, generating employment and income.

The first-line transfer of technology projects were implemented through ICAR institutes, agricultural universities, some State departments of agriculture, and some selected voluntary organizations. Four main Transfer of Technology Projects of the ICAR, namely, All India Coordinated Project on National Demonstrations (AICPND); Operational Research Project (ORP); Krishi Vigyan Kendra (KVK); and Lab-to-Land Project (LLP) are just the examples of first-line extension work. The projects were shifted every 5 to 6 years from one location to another in the larger interest of the farming community and the extension personnel of the area. All the projects were, thus, of mobile type, except the KVKs, which are vocational training institutions. For your better understanding, brief details of these Projects are given below.

6.3.1 All India Coordinated Project on National Demonstrations

This is a nationwide programme of demonstrations, known as National Demonstrations (ND) on major food crops. It was launched in 1964. The rationale behind the scheme was that unless the scientists could demonstrate what they advocated, their advice might not be heeded by the farmers. The conceptual framework of national demonstrations was that it was a nationwide project with a uniform design and pattern. It differed from other demonstrations in the following four major respects (Prasad, Choudhary and Nayar, 1987):

i) There was a specific yield-target and there was no separate control plot near the demonstration. The idea behind this principle was that the entire living memory of the farmers about the yield potential of the crop as well as the entire block in which the demonstration had been laid out would serve as the control.

ii) The area of the demonstration plot was about one hectare (it could be one acre if bigger plots were not available), so that the feasibility of raising a good crop could be strikingly and unquestionably demonstrated.

iii) The farmers in whose plots the demonstrations were laid out were the actual cultivators with small holdings, so that the high yields obtained were not attributed to the effects of affluence.

iv) The agricultural scientists conducted these demonstrations in association with local extension agencies/workers.

To achieve the best results, the most enthusiastic and cooperative farmers were selected, the best technologies and techniques were used, and a team-approach involving scientists from relevant disciplines, including local extension agents was followed. The organization of field days, field visits, and training for the farmers and field extension workers were considered important for rapid spread of technologies.

The national demonstrations were intended to show the genetic production potentiality of new technologies and to influence both the farmers and the extension agencies. The specific objectives of national demonstrations (Prasad, Choudhary and Nayar, 1987) were as follows.

- To demonstrate convincingly to the farmers and extension personnel the genetic production potentialities of major crops per unit area of land and per unit time and encourage them to adopt and popularize these technologies for accelerating production.
- To fully exploit these demonstrations for the purpose of training farmers and field extension functionaries in improved cultivation practices.
- To provide the research workers an opportunity to get firsthand knowledge of the problems being faced by the farmers in adopting high-yielding varieties and practising recommended package of practices.
- To determine the income and employment generation potentialities of the crops/subjects under demonstration, and educate the farmers and extension agents about them.
- To influence the extension systems (the State Departments of Agriculture, voluntary organizations, etc.) in the country by demonstrating the yield-gaps and pointing out operational constraints.

Regarding performance it was observed that, on an average, 50 percent of the demonstrations exceeded the targeted yields of 9 and 11 tonnes per hectare from 2 and 3 crop demonstrations respectively. These demonstrations established, beyond doubt, the wide gap which existed between what was possible by way of production and what was being realized. An analysis of the results of the national demonstrations conducted during 1977-80 revealed that the production of wheat

could be raised by 4 times, rice by 3 times, maize by 3½ times, sorghum by 5 times, and pearl millet by 5 times. The yields of crops in dry-farming demonstrations were double the yields obtained from general farming under un-irrigated conditions.

The cost of production per hectare was higher in national demonstrations owing to adoption of new agricultural technology. The return was also higher and economical as compared to general farming conditions. The output-input ratio i.e. return over per Rupee investment, on an average, was consistently more than 2 during the period 1982-83 to 1984-85 in crops like rice, wheat, sorghum, groundnut and green-gram. The national demonstration project once covered 100 districts spread all over the country.

6.3.2 Operational Research Project

The Operational Research Project (ORP) aimed at disseminating the proven technology in a discipline/area among farmers on a watershed basis covering the whole village or a cluster of villages and concurrently studying constraints (technological, extension or administrative) as barriers to the rapid spread of improved technical know-how. The experience with the National Demonstrations Project highlighted the issue that demonstration of a particular technology or a combination of technologies in an area on watershed basis would prove more effective in convincing farmers and providing them greater scope for identifying constraints, many of which were community-based (Prasad, Choudhary and Nayar, 1987).

The conceptual framework of ORP was that it was primarily devoted to demonstrating the impact of new technologies on a large scale involving a whole village or a cluster of villages at a time. It attempted to involve allied agencies and institutions to show the need for inter-institutional and interdisciplinary approach, the method and the way they could be made to work together.

The ORPs considered two kinds of problems. *Firstly,* the common agricultural problems affecting the farming community requiring group or community action e.g. plant protection and rodent control. *Secondly,* problems related to total resources development of the watershed area. Some of the ORPs attempted to concentrate on the major problem-areas rather than either on a common subject or/on the total resources development like raising agricultural as well as livestock production. The projects emphasized on the introduction of ecologically compatible and socio-economically sound technologies, diversification of labour use, scientific use of land and water, planning for up-gradation of the technological infrastructure necessary for sustained agricultural advance, and development of value-added products in the villages through improved post-harvest technologies. The specific objectives of ORP were as follows.

- To test, adopt and demonstrate the new agricultural technology on farmers' fields in a whole village or in a cluster of few contiguous villages/watershed areas.
- To determine the profitability of the new technologies and their pace of spread among the farmers.
- To identify the constraints both technological as well as socio-economic which are barriers to rapid change.

- To demonstrate group action as a method of popularizing the modern technologies at a faster rate.

The ORPs were initiated in 1974-75. It covered diverse topics like crop farming, mixed farming, integrated pest management, plantation crops, post-harvest technology, improvement of diara and char lands reclamation, arid land management, fisheries, etc. The ORPs demonstrated latest agricultural technologies on the farmers' fields to influence the farmers as well as the State extension agencies. It also studied the socio-economic, technological, extension and administrative barriers which were coming in the way of rapid transfer of technologies and pointed out the same to the extension agencies.

The ORPs were mainly implemented through the agricultural universities, the ICAR institutes and the State departments of agriculture. Selected voluntary organizations with necessary scientific background and support for rural/ agricultural development also undertook such projects. Linkage of these projects with local and allied institutions was emphasized for mutual interaction and multiplier effect.

6.3.3 Krishi Vigyan Kendra (Farm Science Centre)

The Krishi Vigyan Kendra (KVK) has been designed to impart need-based and skill-oriented vocational training to the practising farmers, to in-service field level extension workers, and to those who wish to go in for self-employment. The basic concepts of a KVK are (Prasad, Choudhary and Nayar, 1987):

- The centre will impart learning through work-experience and, hence, will be concerned with technical literacy, the acquisition of which does not necessarily require as a precondition the ability to read and write.
- The centre will impart training only to those extension agents who are already employed or to practising farmers and fishermen. In other words, the centres will cater to the needs of those who are already employed, or those who wish to be self-employed.
- There will be no uniform syllabus for the KVKs. The syllabus and programme of each centre will be tailored according to the felt-needs, natural resources and the potentials for agricultural growth in that particular area.

The three fundamental principles which form the backbone of the KVK programme are: i) agricultural production as the prime goal, ii) work-experience as the main method of imparting training, and iii) priority to weaker sections of the society,. The main idea is to influence the productivity to achieve social justice for the most needy and deserving weaker sections of the society like the tribal farmers, small and marginal farmers, agricultural labourers, drought and flood affected farmers, and the like.

Need-based training courses are designed for different types of clientele. Courses are based on the information received through family and village survey. No certificate or diploma is awarded irrespective of the duration of the courses. After the training, follow-up extension programmes are organized for converting the acquired skills of the trainees into practice. While designing the courses, the concept of farming system is taken into account to make the enterprises commercially viable.

The training starts from farmers' production units such as fields, farms, dairy units, poultry units, sheep units, goat units, pig units, workshops, etc., and terminates in discussion assembly. The training programmes take into account all methods and means which will result in skill development in trainees in the areas of their interest.

The main objective of the KVK is to provide a strong training support for bringing about production breakthrough in agriculture. The specific objectives are as follows.

- To plan and conduct survey of the operational area to prepare the resource inventory with special reference to identify the training needs of the farming community.
- To compile all relevant recommendations/package of practices for the district to be meaningfully utilized in the training courses and the follow-up extension programmes.
- To plan and conduct production-oriented, need-based, short and long duration training courses both on the campus, as well as in the villages for various target groups with priority on the weaker and poorer section.
- To organize Farm Science Clubs, both in rural schools and in villages to inculcate in the younger generation a liking for and an interest in agricultural and allied sciences and for scientific farming through supervised projects.
- To develop and maintain the campus farms and demonstration units on scientific lines as the facilities for providing work-experience to the trainees as also dissemination of the latest technical know-how.
- To provide practical training facilities of the centre to the teachers and the students of vocational agriculture of higher secondary schools.
- To impart some general education to the rural illiterates and school drop-outs in order to make them not only good farmers but also better citizens.
- To provide training facilities in home-making and nutrition education for rural community and gradually encompass other important areas such as home crafts and cottage industries, consistent with the requirements of integrated rural development, in collaboration with concerned organizations.

The objectives stated above are common for all the KVKs. In addition, each KVK has to have a specific mandate i.e. a specific set of responsibilities to perform. The mandate of a KVK is unique for it and is determined on the basis of the most important needs of the clientele, their resources and constraints, and nature of the ecosystem.

The KVK project is sponsored by the ICAR and is implemented by the ICAR institutes, agricultural universities, selected voluntary organizations and some State departments of agriculture The first KVK was established in 1974 at Pondicherry under Tamil Nadu Agricultural University. The priority for establishing KVKs is given to hilly areas, drought-prone areas, forest areas, coastal areas, flood-prone areas, and areas dominated with tribal farmers, weaker sections, small farmers and landless labourers. The objective is to gradually cover the entire country with one KVK in each district, priority being given to the backward areas.

The head of the KVK is the Training Organizer. Training Associates and Training Assistants form the core staff and are drawn from the disciplines like agronomy, horticulture, livestock production, home science, fisheries and extension education. A Local Management Committee (LMC) with representatives from the agricultural university, ICAR, relevant Government departments, panchayat, progressive farmers, etc. is formed for each KVK for providing guidance on its working. Holding regular LMC meetings was found to be an essential condition for successful functioning of a KVK.

The success of a KVK is judged by the extent to which it has been able to fulfill its obligations specified in the mandate. The achievement of the KVK is measured in terms of: i) training courses organized, ii) number of beneficiaries, iii) follow-up field extension activities organized, and iv) the impact of these activities on the farming community in general and agricultural production in particular.

6.3.4 Lab-to-Land Programme

The Lab-to-Land Programme (LLP) was launched in 1979 by the ICAR as a part of its Golden Jubilee celebration. The overall objective of the programme was to improve the economic condition of the small and marginal farmers and the landless agricultural labourers, particularly scheduled castes and scheduled tribes by transfer of improved technology developed by the agricultural universities, research institutes, etc. The specific objectives of the Lab-to-Land programme were as follows (Prasad, Choudhary and Nayar, 1987).

- To study and understand the background and resources of the selected farmers and landless agricultural labourers.
- To introduce low-cost relevant agricultural and allied technologies on their farms and homes for increasing their employment, production and income.
- To assist the farmers to develop feasible farm plans keeping in view the availability of technologies, needs and resources of the farmers, and the resources which could be made available from external sources and agencies.
- To guide and help the farmers in adopting improved technologies as per their farm plans, and demonstrate to them the economic viability of those technologies as well as methods of cultivation and farm management.
- To organize training programmes and other extension activities, in relation to their adopted practices, and prepare them for active participation in agricultural development programmes of the State.
- To make the farmers aware of the various opportunities and the agencies which they could utilize to their economic advantage.
- To develop functional relations and linkages with the scientists and the institutions for future guidance, advisory services and help.
- To utilize this project as a feedback mechanism for the agricultural scientists and extension functionaries.

The programme was initiated with 75,000 farm families over the whole country. It was implemented by the agricultural universities, ICAR institutes, State departments of agriculture and some selected voluntary organizations. No separate staff was provided for the programme. Major thrust of the programme was to

introduce the most appropriate technologies that would help in the diversification of labour use and introduction of supplementary sources of income. The programme had been in operation in a number of phases. Normally, a phase ran for a period of two years with a particular set of farmers.

With effect from 1st April, 1992 all the first-line transfer of technology projects of the ICAR viz. ND, ORP and LLP have been integrated into KVKs. In the reorganized system, the general mandate of the KVKs included the following.

1) To collaborate with the subject-matter specialists of the State Agricultural Universities, scientists of the Regional Research Stations (National Agricultural Research Project) and the State extension personnel in 'on-farm testing', refining and documenting technologies for developing region-specific sustainable land use systems;

2) To organize training to update the extension personnel within the area of operation with emerging advances in agricultural research on regular basis;

3) To organize long-term vocational training courses in agriculture and allied vocations for the rural youths with emphasis on 'learning by doing' for generating self-employment through institutional financing and on-and off-campus training courses for the farmers with a view to increasing production on their farms; and

4) To organize front-line demonstrations in various crops to generate production data and feedback information.

Over the years, the KVKs have emerged as a national network of training organizations at the base level for imparting to the farmers, farm women, rural youth and extension functionaries the improved knowledge and skills generated through research at the State Agricultural Universities, Indian Council of Agricultural Research and State Government institutions, among others.

Trainers' Training Centre (TTCs): TTCs have been established in specialized subjects mainly in the ICAR institutes for in-service training of the teachers/ trainers of the KVKs and such other non-degree level institutions. The centres offer in-service training courses for the trainers/instructors of the extension training centres, farmers' training centres, agricultural schools, and teachers dealing with work-experience and vocational courses. The training courses of the TTCs are mostly ad-hoc in nature and are tailored to the needs of the in-service trainees/specific interest groups, Training facilities in dry-land agriculture, horticulture, agricultural engineering, dairying, inland and marine fisheries, home science and agriculture have been opened up.

Check Your Progress

Notes: a) Space given below the question is for writing your answer

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

3) State the important objectives of the projects under first-line extension model.

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4) Name some of the programmes under the first-line extension model.

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6.4 CONVENTIONAL MODEL – TOP-DOWN MODEL

The top-down model is also called bureaucratic model. In extension work we can conveniently call it as Ministry-based General Extension Model.

6.4.1 Ministry-based General Extension Model

Shortly before and after independence of India, organizing agricultural extension work under the wings of the ministry of agriculture seemed to be an ideal solution for many African and Asian governments. The fact that the ministerial hierarchy followed in the country's territorial sub-division allowed the systematic expansion of the system "down" to the village. The generalist nature of field extension staff functions corresponded to the set of problems faced by noncommercial growers. To cater to specific needs -- in terms of technology or target groups — specialists could be employed. Thus, in principle, clientele included all persons engaged in agriculture. Commercial service and support organizations lacking village-level extension staff could be expected to supplement information by rendering services necessary to apply it productively. A uniform and nation-wide organizational pattern seemed to facilitate information flow. Public interest was to guide goal setting, programme formulation and the implementation of fieldwork. A review of the last thirty years of extension work in Africa and Asia shows that reality is quite far, for failures are complex and manifold and cannot be removed easily from this vision (Moris, 1991):

- Ministry-based extension has been unable to reach a majority of its potential clientele for economic, socio-psychological and technical reasons. Even dramatic quantitative increases in personnel — more staff closer to the farmer — have not produced manageable client-to-agent ratios. In recent years, the trend has even been negative. Financial constraints have produced a strong pressure to reduce staff, and the field level has been hit hardest.

- The hierarchical and highly bureaucratic way in which the services are organized hampers full realization of their potential. Priority setting for research is rarely based on extension field evaluations because the system does not foster critical upward communication. The way in which technical (and other) knowledge is transformed into field messages frequently leads to distorted and outdated information.

- In the eyes of the ministry, extension has never been a purely educational activity. Non-educational activities included anything from statistical data

collection to attending to foreign visitors. Incompatible with and clearly detrimental to regular extension work are such activities as supervising credit repayment, policing disease control measures, organizing "voluntary" community work, and electioneering.

- Many extension workers select the more responsive section of their clientele. They may have to fulfill production plans, they may want to improve job-satisfaction or status, or they may simply be prejudiced against certain target groups. Adequate and location-specific answers to a farmer's problem are often not available because it has not been a research concern or the solution has simply not reached the field.

- Ministry-based extension employs thousands of persons working under a wide variety of circumstances. Decision-making and management are highly centralized and formalized and lack in control from below. Extension fieldwork, on the other hand, demands location-specific, flexible, and often quick decisions and actions. Managing the "invisible" man or woman (Chambers, 1974) must be highly ineffective as long as (s)he is expected to receive and execute orders.

All these problems are well known, and criticism has come both from within and outside the ministry. What has been lacking is organized feedback from clientele. Farmers may show their discontent by refusing to cooperate with extension, but they have virtually no way of influencing institutional reforms. Some improvements to the bureaucratic or top-down model were however made possible by following certaint approaches such as the following discussed in sub-sub-section 6.4.1.1.

6.4.1.1 Strengthening and Re-organisation of Agricultural Extension Administration in the States: Training and Visit (T & V) Extension

The Government of India sponsored a scheme for "Strengthening and Re-organisation of Agricultural Extension Administration in the States" for its implementation during the Sixth Plan period. This scheme is based on the new agricultural extension methodology known as the 'Training and Visit" (T & V) system (also known as the Benor system, as Mr. Benor was instrumental in introducing this innovation in extension work). This system which was evolved on the basis of experience in the command areas of Rajasthan, Madhya Pradesh, Andhra Pradesh, etc., under the World Bank assistance has yielded very encouraging results.

Salient features of T & V Extension: The basic spirit behind the T & V Extension is that any land, even though it may not ever have produced a satisfactory crop in the past, can yet be made to yield an optimum crop according to its capacity within the crop season period of 4 to 5 months only, provided the farmer can be advised what to do on his own field step-by-step, as per stage of crop growth, every week or fortnight. The methodology provides for a management system which can ensure delivery of expert know-how to almost every field on a State-wide basis every week or fortnight. Transfer of know-how from Subject Matter Specialists to the farmer is ensured in two stages, through:

- *"Training"* -- for transfer of know-how from Subject Matter Specialists to extension workers, and

- *"Visits"* -- for transfer of know-how obtained at the training from extension workers to the farmers.

Change in the organizational structure: The entire then existing organisation was changed based on the total number of farm families which one village extension worker (VEW, VEO or VLW) can reasonably cover. It is organised in such a manner that an Agricultural Extension Officer (AEO) guides, trains and supervises about six to eight village extension workers. Six to eight AEOs are in turn, guided and supervised by a Sub-Divisional Extension Officer (SDEO). The SDEOs are supported by a team of Subject Matter Specialists (SMSs). Four to eight SDEOs are supervised by a District Extension Officer (DEO) who is also supported by SMSs. Depending on the number of districts, the DEO is supervised either directly by Extension staff at Headquarters or by an intermediate superior (See Figure 6.2 for Organizational Chart).

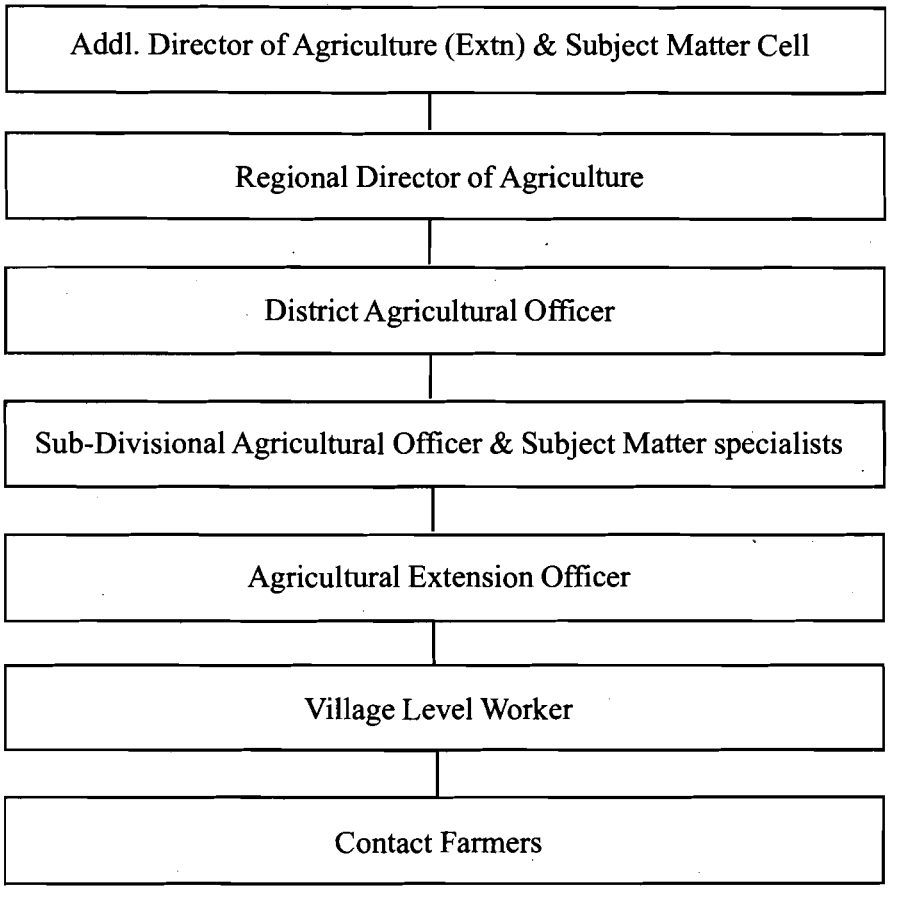
Addl. Director of Agriculture (Extn) & Subject Matter Cell
Regional Director of Agriculture
District Agricultural Officer
Sub-Divisional Agricultural Officer & Subject Matter specialists
Agricultural Extension Officer
Village Level Worker
Contact Farmers

Figure 6.2: Organizational Chart (T & V System)

Table 6.1: Coverage of Various Extension Personnel

Level	Extension personnel	Coverage
Field level	Village Extension Worker (VEW)	800-1200 farm families
Block level	Agricultural Extension Officer (AEO)	8 VEWs
Sub-Divisional level	Sub-Divisional Extension Officer (SDEO)	5-8 AEOs
District level	District Extension Officer (DEO) or District Agricultural Officer (DAO)	4-8 SDEOs in a district.

All farm families under a VEWs jurisdiction are divided into eight groups of about equal size. From each group the VEW in consultation with village leaders will select about 10 per cent of the farmers as contact farmers on whom he will concentrate his efforts. The key point here is a fixed schedule of VEW visits, known to all under a fortnightly programme of visits. The VEW visits each of the eight groups on his cycle for a full day once each fortnight. An alternative is to visit two groups a day. In this case he will visit each group for one-half of a day only but once every week. Each week the VEW will devote four days to visits so that he covers his entire circle of eight groups in a week or a fortnight (depending on which of the above alternatives is chosen). One of the two remaining working days in each week will be devoted to in-service graining which is crucial to this programme and the other day for unscheduled visits. One of the training sessions each fortnight will be conducted by the team of Subject Matter Specialists (SMSs) responsible to the area. This will be the most important training session. The session is scheduled so that the VEWs are trained for a full day in groups of 30-40. The other weekly training session during the fortnight will be conducted by the AEO who is the immediate supervisor of the VEWs, for the groups of VEWs under his charge. The schedule of visits and training takes up 10 to 12 working days in the fortnight. Each VEW will maintain a table showing his fixed days for visiting each group and the time and place of the meeting.

The AEO will spend two days in training sessions for VEWs and eight days in the field supervising the VEWs and assisting them. The Sub-Divisional Extension Officer (SDEO) supervises VEWs under his jurisdiction and is in over all charge of the extension programme. The SDEO would have with him a team of SMSs. The SMSs would devote one-third of their time to VEW training sessions, one-third to field and remaining one-third time visiting research facilities and conducting some research. In a fortnight, a team of SMSs has four days available for VEW and AEO training sessions. The DEO would be involved in regular training sessions of the VEWs and AEOs as and when needed. At zonal level, the Zonal Extension Officer (ZEO), will be responsible for all extension activities in his/her districts and will be assisted by a few administrative staff only. The headquarters level may be different from state to state. It would be best if the headquarters unit dealt with agricultural extension exclusively and were called Extension Service, rather than Department of Agriculture. The Director of Extension or Additional Director of Agriculture (Extension) would be assisted by three deputies in-charge of administration, technical aspects and execution and implementation of work.

T & V extension is not a separate approach but one way to organize ministry-based extension. Rather than trying to reach all farmers directly, the system concentrates on *contact farmers* expected to pass on information to fellow farmers with similar problems. To ensure regular field contacts, to facilitate supervision and communication, and to set clear and attainable objectives, fixed *visits at regular intervals* are prescribed. Similarly, regular sessions for extension workers to receive *training* and discuss administrative matters are held. Costly refresher courses are avoided, knowledge may be enhanced step-by-step, and up-to-date information can be fed into the system. In practice, T&V has been a top-down approach leaving little possibility for participation and initiative both by farmers and village extension workers. Too little emphasis has been put on critical feedback based on self-evaluation. As a result, rigidity rather than flexibility

characterized local fieldwork. The standardized messages passed on are often of little relevance to local conditions. Once T & V was extended to less favoured regions, it soon became clear that technology of the green revolution type showing quick and visible results is not available. Still, training sessions were held and visits made according to schedule, leaving behind disinterested farmers and de-motivated extension workers (Benor & Harrison, 1977, pp.6-9).

However, the limited success of T & V as a nation-wide extension system should not discredit the quality and appropriateness of many of its elements. Applied less rigidly and combined with the tools of human resource development as well as with the concept of participation, these elements may constitute a valuable base for reforming extension organizations, large or small (Nagel, et al., 1992).

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

5) What are the major drawbacks or failures of the conventional Ministry-based extension model?

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6.5 UNIVERSITIES EXTENSION MODEL

The University Education Commission (1949) headed by Dr. S. Radhakrishnan recommended the establishment of 'Rural Universities' in India. Endorsing this idea, the two Joint Indo-American Teams on Agricultural Research and Education (1954-55 and 1959-60) recommended the setting up of Agricultural Universities in the States on the pattern of Land Grant Colleges of the United States of America. Accordingly, the first agricultural university came into existence at Pantnagar, Uttar Pradesh in 1960. All the major States in India now have at least one Agricultural University, while some States have more than one.

Universities for Horticulture and Forestry in Himachal Pradesh, Veterinary and Animal Science in Tamil Nadu, Animal and Fishery Sciences in West Bengal and a Central Agricultural University at Manipur, with campuses for various disciplines in different Eastern States on the lines of the agricultural universities have also been set up to extend the benefits of extension to diversified clientele. Besides these, deemed universities like the Indian Agricultural Research Institute, Institutes of Agriculture of the Central Universities and Visva-Bharati also carry

out the integrated function of teaching, research and extension, like the agricultural universities.

6.5.1 Agricultural Universities: Extension Role and Set-up

The extension role of agricultural universities as presented in the Report of the Review Committee of Agricultural Universities headed by Dr. M. S. Randhawa (1978) include the following.

- State-wide responsibility for teaching, research and extension education.
- Integration of teaching, research and extension at all levels of university administration.
- Multi-disciplinary team-work in the development programmes of education, research and extension.
- Acceptance by all concerned in the university a philosophy of service to agriculture and the rural community and emphasis on programmes which are directly and immediately related to solving social and economic problems of the countryside.
- Quick communication of new knowledge to students in classrooms, extension personnel and farmers.
- Programmes giving specialized training to the rural youth and adult men and women, who are not candidates for degrees, through departments involved in responsibility for the subject matter being taught.

One of the essential features of the agricultural university system is the acceptance of the philosophy of service to agriculture and rural community. To fulfill this commitment, it is essential that each agricultural university has an adequate and efficient extension setup for the speedy and effective communication of new knowledge and technology to the extension agents and to the farmers.

Concept of a Division into Teaching, Research and Extension: Each teaching department represents within it all the elements of teaching, research and extension pertaining to that particular discipline. Broadly, the extension education setup in the agricultural university is as follows.

1) *Teaching in extension education:* This is to train and produce professionals for teaching, research and field extension work, and provide dynamic leadership to extension programmes through a sound, systematic and integrated under-graduate and post-graduate teaching in extension education.

2) *Research in extension education:* This is to undertake research on various facets of extension with a view to enriching programme formulation and operation and to develop new methodology and approach for speedy transfer of new technology to farmers in their farms and homes. For implementation of research projects like the National Agricultural Research Project (NARP), extension of the agricultural university has to be research-oriented and shall perform mainly the following functions:

   i) conduct survey and pinpoint farmers' problems for research,

   ii) conduct adaptive/on-farm trials with advance research materials in farmers' fields,

iii) conduct demonstrations in the farmers' fields on the technologies recommended by research,

iv) provide advisory service to the farmers of the area,

v) conduct training programmes for farmers and extension agents,

vi) provide information communication support for extension work, and

vii) evaluate the extent to which the project work has been successful and identify deficiencies and problems for further research.

3) *Application of extension education:* The field extension work of the agricultural universities is designed to:

i) plan, organize and conduct production and problem-oriented training of various types and durations for extension personnel;

ii) collect, process and disseminate latest research findings to extension personnel and extension clientele through appropriate methods and media;

iii) produce information materials and teaching aids for extension personnel, trainers and farmers;

iv) carry out limited frontline demonstrations based on latest research findings and identify field problems as feedback to research departments;

v) provide effective farm advisory service to farmers, farm women, farm youth, extension personnel, bankers, input dealers and manufacturers, voluntary farm organizations and others concerned with agricultural development; and

vi) undertake special surveys and carry out operational research projects to test the applicability of findings under different agro-climatic and socio-economic conditions in different parts of the State.

While the teaching and research functions are carried out by the Department of Extension Education, the application of extension education in the field is made by the Directorate of Extension Education of the agricultural university. The Indian Council of Agricultural Research (1993) observed that field extension work is attracting low priority at the State Agricultural Universities, preferred priorities being teaching and research.

Nevertheless, the Agricultural Universities cooperate and coordinate with the concerned State Departments in reinforcing these Departments in terms of training and other technical and resource support in implementing and promoting Ministry-based general extension programmes. Apex Body in each State under the Chairmanship of the relevant Minister and having the Vice-Chancellor of the University and the Directors to Agriculture, Animal Husbandry and Fisheries and Agricultural Production Commissioners / Development Commissioners as its members has the overall responsibility of ensuring that the two organisations work in harmony and in the best interest of an all round development of agriculture in the State.

6.5.2 Extension Education Institutes: Integration with Agricultural University System of the States

To cater to the extension education and training needs of the large number of extension professionals in the country, four Extension Education Institutes (EEIs) were established in India at the regional levels at: Nilokheri in Haryana (1959), Anand in Gujarat (1962), Hyderabad in Andhra Pradesh (1962), and Jorhat in Assam (1987). Though some of the institutes were independently set up, these were subsequently integrated with the Agricultural University system of the States.

In order to meet the emerging challenges and to enhance vitality and vigour of the Extension Education Institutes, Misra (1990) suggested a five-point strategy to redefine them to:

i) assume overall training responsibility in the region,

ii) establish firm linkages with State Training Institutes and Extension/ Agriculture Training Centres,

iii) specialize in extension methodology and communication technology,

iv) introduce training in computers, and

v) monitor and evaluate extension training in the region.

6.5.3 National Institute of Agricultural Extension Management

With the introduction of the Training and Visit system of agricultural extension (discussed under Section 6.4 above) management in extension assumed greater significance. This led to the setting up of the National Institute of Agricultural Extension Management (MANAGE) at Hyderabad in 1986. The Institute aimed at promoting effective management of the agricultural extension system of the country through consultancy, training, research, information and documentation. The challenges before MANAGE were (Misra, 1990):

i) *To emerge as a training leader at the national level in the field of extension management.* For this purpose MANAGE is required to establish firm linkages with State Agricultural Universities, Extension Education Institutes and State Departments of Agriculture.

ii) *To concentrate on extension management.* Its focus on training should be: on a) extension project planning and administration, b) extension personnel management, d) training of extension personnel, e) research-extension linkages in extension projects, and f) monitoring and evaluation of extension projects.

iii) *To adopt a pragmatic approach to extension training development.* It should give practical orientation to its training activities, avoid any theoretical or academic exercise and firmly weld the training activities to the 'field' problems experienced by extension personnel in serving the farmers.

iv) *To pay attention to infrastructure development.* To ensure careful detailed planning of future requirements and close supervision of activities.

v) *To provide leadership in encouraging the use of new electronic technology, notably video-tapes and computers in extension training.* The institute should build up the capability to prepare video-tapes on different aspects of training

and share them with other training institutions so as to reach the benefits of the Interactive Computer Video Technology (ICVT) to the extension personnel.

Under the University Extension Model in addition to Aus EEIs and MANAGE extension work is also carried out in diverse ways through the centres such as the following, among others.

6.5.4 District Agricultural Advisory and Transfer of Technology Centres (DAATTCs)

The University believes in the concept that every research scientist should also be an extension worker, when it is a question of serving the farmers and thus work in active association and close cooperation with the farmers. This has enabled the research scientists to carve a niche in the hearts of the farmers and earn their good will. The farmer-scientist interaction which takes place frequently has brought high degree of confidence among farmers. In order to reinforce and strengthen this mode of working, the University has reorganized its extension wing by locating the scientists at the district headquarters so as to enable them to operate in cooperation and collaboration with all the line departments.

Objectives of DAATT Centres include the following:

- To update data base for developing action plans;
- To assess and refine technologies generated by research for suitability to different farming situations;
- To conduct diagnostic surveys, identify field problems and provide scientific solutions;
- To organize Kisan melas;
- To extend scientific expertise to the line departments in training programmes and preparation of information materials;
- To establish liaison with all the stake-holders in the district;
- To assist in implementation of Rural Agricultural Work Experience Programme RAWEP;
- To maintain an agricultural information centre;
- To coordinate with AIR, TV and print media for dissemination of information; and
- To implement any other extension programme in coordination with the line departments.

6.5.5 Krishi Vigyan Kendras (KVKs): Technology Assessment and Refinement

As we have discussed in Section 6.4 above, Krishi Vigyan Kendras are grass root level institutions devoted for implementing skill-oriented programmes to illiterate, small, marginal, landless farmers, farm women and rural youth by organizing short and long term vocational training courses and income generating activities in addition to demonstration of latest technological developments at

the centre and Technology Assessment and Refinement in the farmers' field conditions. ICAR has sanctioned KVKs not only to ICAR Institutes but also to the State Agricultural Universities with following mandate.

> Conducting "on-farm testing" for identifying technologies in terms of location- specific and sustainable land use systems. Organise training to update the extension personnel with emerging advances in agricultural research on regular basis. Short and long-term vocational training courses in agriculture and allied fields for the farmers and rural youths with an emphasis on "learning by doing" for income generation and self-employment. Frontline demonstrations on various crops to generate production data and feedback information.

Technology Assessment and Refinement (TAR): "On-station research-adaptive research-extension" is a continuum culminating in the generation of profitable technologies to the farmers. Technology refinement and development are crucial intermediate steps between research and extension to develop location-specific relevant technologies for adoption. The yield-gaps between technologies generated by researchers at Research Centers and the farmers' field conditions, resource poor and risk situations are often mistakenly attributed to inadequate extension efforts. But, this has also been traced to the unsuitability of the technologies flowing out of the research stations. Hence, technology assessment and refinement under farmer's field conditions assume greater importance. DAATTCs and KVKs have enhanced extension reach through TAR.

6.5.6 Agricultural Information and Communication Centre (AI & CC)

The Agricultural Information and Communication Centre (AI & CC) functions with the mandate of disseminating agricultural information to the farmers and extension personnel through print and electronic media. It provides information support to the various activities organized by University. This center is responsible for processing of latest agricultural information generated by the university and transferring it for the benefit of end-users in the state through various publications and media combinations. The center publishes various research and extension publications in English and local languages, besides sending news bulletins regularly to All India Radio. Its *objectives* include the following:

- Disseminating agricultural information to the farmers, extension personnel and others interested in agriculture and allied fields through print and electronic media.
- Printing of agricultural information material like research and extension bulletins, house journals (Newsletters), Journal of Research and various Magazines in local languages.
- Arranging radio scripts for the daily farm radio news bulletin to be broadcast by All India Radio.
- Answering queries raised by the farmers and developmental organizations through personal and telephone calls as well as by mail.
- Assisting in arranging Kisan Melas, organization of state and national level exhibitions, field visits for farmers, officials, extension functionaries and others.

- Publicizing various activities of University through press, radio and television.
- Taking a lead role in making arrangements of the important events of the university like annual convocation, seminars, conferences, etc.

6.5.7 Agricultural Technology Information Centre (ATIC)

Agricultural Technology Information Centres (ATIC) in different states in the country function with the following objectives.

- To provide a single-window delivery system for the seeds / seed material / products available with the institutions of the University to the farmers as a process of technology dissemination.
- To facilitate direct access to the farmers to the university resources in terms of technology, advice, technological products, etc. to reduce technology dissemination losses.
- To facilitate feedback mechanism from the users to the University.

6.5.8 Call Centres

The call centres with toll-free telephone numbers serve the farming community by answering queries on the field problems in respect of crop production, crop protection, soil science, horticulture and general agriculture.

6.5.9 Extension through Distance Education Institutes / Open Universities

Since you are the students pursuing your programme through open and distance learning you are already familiar with different aspects and concepts of distance education. For your effective recall of all these, you can revisit Course MAE-001 of your programme.

Distance education, as you are already aware, is the process of educating large number of people, dispersed and distantly located, with systematically prepared and developed material and with little face-to-face interaction between the teacher and the taught. It is characterized by no rigid entry qualifications, learning according to one's own pace and convenience, flexibility in choice of courses and use of modern and appropriate methods of education and communication. It caters to those sections of the society which either being located in far-flung remote areas, or because of economic compulsions cannot take the advantage of formal education, or who at some stage had to discontinue their formal education.

You will appreciate the fact that you are accessed by the distance education, which has hitherto extended you the benefits of distance and open learning enabling you to pursue this course. You are thus well aware of the benefits of extension through distance education and does not require any emphasis here.

In Indian Open Universities such s IGNOU with its School of Agriculture, School of Extension and Development Studies, Centre for Extension Education and similar units in State Open Universities are also engaged in extension education activities using different media such as print, audio, video, face-to-face interaction, radio, television, teleconference, internet and other online modes as well.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

6) Explain the significance of the Universities Extension Model.

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6.6 COMMUNITY MODEL OR COMMUNITY-DRIVEN MODEL

Agricultural Technology Management Agency (ATMA) has been established at district level as an autonomous institution to provide flexible working environment involving all the stakeholders in planning and implementation of extension activities of agriculture and allied sectors adopting a farming systems approach and convergence of programmes of related departments. Local research and extension priorities are set through Strategic Research and Extension Plans (SREPs), which are developed using participatory methodologies. We will discuss some important aspects of ATMA below.

6.6.1 Agricultural Technology Management Agency (ATMA)

The institutional mechanism in the form of Agricultural Technology Management Agency (ATMA) at the district level was pilot tested under Innovations in Technology Dissemination (ITD) component of National Agricultural Technology Project (NATP) in seven states covering 28 districts from 1998 to 2004.

Salient Features of ATMA: ATMA is a body registered under the "Societies Registration Act of 1860" that has considerable operational flexibility. It operates under the guidance of a Governing Board (GB) that determines program priorities and assesses program impact. The executive head of ATMA is known as the Project Director (PD) and reports directly to the ATMA Governing Board.

One of the most important activities undertaken by ATMA is to prepare Strategic Research and Extension Plan (SREP), which consist of detailed information about agriculture and allied sectors in the district. The purpose of preparation of SREP is to identify research and extension needs of the district. This helps in

undertaking only those extension activities which are needed by farmers in the district. SREP is prepared with full participation of farmers and their representatives at different level. Technical officers of agriculture and allied departments as well as from KVKs and other research institutions fully participate in preparation of SREPs.

Strategic Research and Extension Plan (SREP): ATMA is mandated to develop a demand-driven, situation-specific, multi-actor oriented Strategic Research and Extension Plan (SREP) to accelerate agricultural development in the district. The SREP is the process of identifying research and extension gaps in agriculture and allied sectors. It suggests an appropriate strategic plan for agricultural development of the district. In the strategic research and extension planning the concerns and emphasis will be on:

- Future — long-term dynamics is its concern; not day-to-day task.
- Growth — direction, extent, pace and timing of growth.
- Environment -- the fit between the organization and its environment.
- Strategy — Building strategy is its concern; not the operational activities.
- Integration – Forging integration is its concern; not a particular function.
- Creating Core Competencies — creating competitive advantages, long-term, sustainable, organizational capacity is its concern.

Based on the research-extension strategies given in the SREPs, block / district level plans are developed by ATMA institutions. The State Extension Work Plan developed at state level is a consolidated activity-wise plan incorporating all the district level plans and the state level activities. In order to provide needed Human Resource Development (HRD) support in the innovative areas of extension delivery, State Agricultural Management and Extension Training Institute (SAMETI) has also been established in each state.

Later, the National Commission on Farmers (NCF), 2004 has examined the issues relating to farmers and made the following recommendations.

i) Commodity-based farmers' organizations should be promoted to combine the advantages of decentralized production, centralized services, post-harvest management, value addition and marketing, for leveraging institutional support and facilitating direct farmer–consumer linkage. It would provide small farmers 'power of scale'.

ii) Considering that majority of our farmers are small and resource-poor and depend heavily on public good technologies and information, the public sector agricultural extension men and women should be empowered and sensitized to meet the demands particularly by forging research–extension–education–farmer–market linkages.

iii) Farmer to farmer learning is the most credible and effective. For this purpose, Farm Schools may be established in the fields of outstanding farmers and awardees of nationally recognized awards for farmers.

iv) Recognizing the input dealers and suppliers as second most common source of information for farmers, regular trainings of the dealers / suppliers / retailers

should be organized not only to update their knowledge but also to improve their communication skills and attitudes to empower farmers with new information on inputs use and farming operations.

v) Information and Communication Technology (ICT) should be effectively harnessed to empower rural men and women through 'Every Village a Knowledge Centre' movement with farming system and season-specific information as well as market and price information.

Extension reforms were introduced during 2005-06 by the Department of Agriculture & Cooperation (DAC), Ministry of Agriculture, Government of India as a major intervention in addressing the constraints as observed in T & V and post T & V system by making the extension system farmer-driven and farmer-accountable through process and institutional reforms mechanism. The key features of reforms are:

i) New institutional arrangements – Decentralized decision-making;

ii) Convergence of line departments – gap-filling mode;

iii) Multi-agency extension strategies – encourage private sector (minimum 10% allocation);

iv) Broad-based extension delivery through Farming Systems Approach (FSA);

v) Group approach to extension through Farmers Organizations (FOs) and Commodity Interest Groups (CIGs);

vi) Gender concerns -- Minimum 30% allocation;

vii) Sustainability of extension services – Minimum 10% beneficiary contribution;

viii) Bottom-up planning.

Dovetailing the strengths of T & V System in ATMA: Village Extension Worker (VEW), who is the most important link at the field level plays crucial role in delivery of extension services under the T & V System. This system had adequate staff for the purpose from district to village level, though it currently faces several manpower constraints. The revitalized extension system must have a mechanism to provide training and capacity building support to extension functionaries belonging to both governmental and non-governmental sectors. The Strategic Research and Extension Plans (SREPs) prepared by district ATMA through bottom-up participatory processes provide an excellent base for identifying training needs of extension functionaries. At present the concept of SMSs is institutionalized in the form of Krishi Vigyan Kendra (KVK) with multi-disciplinary team of scientists at district level in almost all the districts of the country. The State Agriculture Universities and ICAR institutions provide an impressive network of institutions having the requisite knowledge base. The SAUs/KVKs and ICAR institutions are to be involved in providing holistic institutional training to extension functionaries belonging to both governmental and non-governmental sectors.

6.6.2 Rashtriya Krishi Vikas Yojana (RKVY)

The agricultural sector showed a growth rate of 3.16 per cent GDP during 1990 to 1996. This trend caused a serious concern due to the fact that agricultural

productivity in most of the states was quite low in spite of a great potential for growth of agriculture and allied sectors in India. Keeping this in view, the National Development Council (NDC) constituted various groups to search for probable causes of stagnation in agricultural productivity. These reports were critically reviewed by the Ministry of Agriculture and NDC and launched a special additional central assistance scheme popularly known as Rashtriya Krishi Vikas Yojana (RKVY) in the country. The Scheme was launched by Government of India during 2007-08 to rejuvenate the agriculture and allied sectors including fisheries with a booster dose of investment, across board and correct to the planning process at the sub-state level.

Objectives of RKVY: The RKVY aimed at achieving 4% annual growth in the agriculture sector during the XI Plan period, by ensuring a holistic development of agriculture and allied sectors. The main objectives of the scheme are:

1) To incentivize the states so as to increase public investment in Agriculture and allied sectors.

2) To provide flexibility and autonomy to the states in the process of planning and executing agriculture and allied sector schemes.

3) To ensure the preparation of agriculture plans for the districts and the states based on agro-climatic conditions, availability of technology and natural resources.

4) To ensure that the local needs/crops/priorities are better reflected in the agricultural plans of the states.

5) To achieve the goal of reducing the yield-gaps in important crops through focused interventions.

6) To maximize returns to the farmers in agriculture and allied sectors.

7) To bring about quantifiable changes in the production and productivity of various components of agriculture and allied sectors by addressing them in a holistic manner.

6.6.3 Farmers' Organizations, Federations and Linkages

Farmers Organizations are seen as a useful organizational mechanism for mobilizing farmers' collective self-help action aimed at improving their own economic and social situation and sustainable development of their communities with focus on not only agriculture but also allied sectors thus leading to empowerment of the members of farmers' groups. Such organizations were perceived to have an ability to generate resources from their members and operate at different levels from the local to the national through adaptive research and extension, overall priority setting and multiple linkages with the technology and marketing systems.

Significance of farmers' organizations: Farmers' organisations have an important role in development. They provide space for participation, which contributes to group members' ownership of the issues at hand as well as any solutions therefor. This in turn builds group cohesiveness, solidarity and promotes mutual support. They can be the platform for building a sense of community and a social support system for increasing self-confidence, learning together and

providing a sense of equality. A well-organised group can be taken seriously in a wider environment. Farmers' organisations are increasingly about empowerment of individuals as well as of the groups themselves. Groups with common interests can secure access to services that individuals otherwise cannot, such as training, credit or equipment. Lack of access to any of these could become vital issue that an individual farmer faces. Hence, by joining a group, they get different opportunities arise that enable individual farmers to learn, decide and act. This is particularly the case where farmers organise as a response to marketing concerns, as there are many economic and other benefits of working in groups. These include the ability of groups to buy inputs in bulk, to access more distant markets, and to access timely and useful information. Further, working together can increase members' bargaining power, which helps to share, and lower risks and costs. In areas where farmers are scattered geographically, and transport and communications are difficult, the importance of such organisations is even greater. Lastly, farmers' groups are an important way for farmers to become recognized economically, socially and politically. With increased emphasis on farmer-led or demand-driven development processes, group is an important tool enabling farmers to lead the way and to get more power. By building on what they have (including knowledge, interests and obligations), organising them is an important way for farmers to have a voice and increase their influence. This is vital when working towards improving their own social, economic and environmental conditions and achieving through lobbying and advocacy activities.

6.6.3.1 Types of Farmers' Organizations

Farmers' organizations can be grouped into two types, viz.

i) Community-based resource-orientated organizations, and

ii) Commodity-based and market-orientated organizations.

Community-based, Resource-orientated Farmers' Organizations: This type could be a village level cooperative or association dealing with inputs needed by the members and the resource owners to enhance the productivity of their businesses based on land, water, or animals. These organizations are generally small, have well-defined geographical areas, and are predominantly concerned about inputs. However, the client group is highly diversified in terms of crops and commodities. There are many primary-level agricultural cooperatives in the developing world, but the majority of them have been financially vulnerable and ineffective. Strategies have been developed to strengthen these organizations. This group of organizations can generate income from the sale of inputs and outputs. The income can then be put back into the organization by spending it on extension, data generation, business planning, and administration. It is essential to have professional and honest management with constant monitoring and periodic rounds of evaluation (Gupta, 1989).

***Commodity-based, Market-orientated Farmers' Organizations*:** These organizations specialize in a single commodity and opt for value-added products, which have expanded markets. They are designated as output-dominated organizations. Not specific to any single community, they can obtain members from regional growers of that commodity who are interested in investing some share capital to acquire the most recent processing technology and professional manpower. These FOs are generally not small and have to operate in a competitive environment. Research, input supply, extension, credit, collection of produce,

processing, and marketing are all integrated to maximize the returns on the investments of the members who invested in the collective enterprise. Several successful cases found in India include the organizations such as Grape Growers' Associations, Onion Growers' Associations, Mulkanoor Cooperative Marketing Society, Amul Milk and other dairy FOs, etc.

In Taiwan, a rather unique approach has been practised, where a large share of extension work is done through farmers' associations (Lionberger & Chang, 1970; Axinn & Thorat, 1972). Organized at provincial, county and township levels, membership totaled 90 per cent of Taiwanese farmers. Extension education is done by agents employed by the farmers' associations at the township level and financed largely by the farmers themselves.

Many governmental and non-governmental organizations have also been trying to organize farmers into groups and integrate them into the development process by actively involving them in transfer of technology, production and marketing, planning, implementing and monitoring of different projects on rural development, agriculture and allied sector development, natural resource management, etc. Some of the popular examples of initiatives taken to mobilize and organize the farmers are: Farmers Interest Groups (FIGs) / Farmers Organisations (FOs) under National Agricultural Technology Project; Farmers federation under UPDASP; Watershed Associations, Farmers' organizations (FOs and FIGs) under Participatory Watershed Management Programs; Vanasamrakshana Sameti under Joint Forest Management Projects; Farmers Clubs under NABARD scheme; Self-Help Groups of farmers organized by MYRADA and CEAD; and Rythu Mithra Groups (RMG). Other examples include: the farmer clubs formed in each village in Andhra Pradesh, primarily to facilitate group extension and transfer of technology among farmers in the village; and SHGs of vegetable and fruit growers formed by the Kerala Horticultural Development Programme (KHDP) to promote new technology and participatory technology development (PTD) skills and to help the farmers access credit and strengthen their negotiating and collective marketing power through the Vegetable and Fruit Promotion Council, Kerala.

The rate of success of these organizations is determined by their capacity to arrange for major investments and a continuous flow of raw materials. This requires the competent and convincing management of both enterprise-related and member-related aspects. The profits generated are used to provide supplementary and supportive services at reduced cost to encourage members to use them. This requires high caliber representatives and enlightened leadership from among the grower members. It is a challenging and demanding task to conceive, design, build, and nurture this type of FO. In rural areas where producers are dispersed and scattered, and communications are not even optimal, the importance of these organizations is still greater. The village level groups are being provided in-depth capacity-building on group dynamics and convergence of developmental programmes through farmers groups in the initial stages. Experiences have shown that the farmers' groups, which are being organized on the pattern of group dynamics, self-help modalities can provide a sustainable foundation. This may include commodity groups in agriculture, horticulture, livestock, etc at village level, commodity associations, federations of farmers' groups at different levels, etc.

6.6.3.2 Research-Extension-Farmer-Market Linkages: Types and Reasons for Failure

Over the past few decades, the major sources of agricultural growth have been diffusion of modern varieties, intensification of input-usage and investment in irrigation. In areas where green revolution has had its major impacts, growth from these sources is gradually slowing down. Now, latest technologies are needed to push out the yield frontier, utilize the inputs more efficiently, diversify to more sustainable and higher value cropping patterns to realize more farm income. These knowledge-intensive technologies require strong research-extension-farmer-market linkage mechanism to achieve the desired results.

Types of linkages and utility: Indian agriculture has made rapid strides in achieving self-sufficiency in food production. However, the pattern of growth has contributed for uneven development across the regions, crops and also different sections of farming community. To create a demand-driven research and extension system, it is essential that farmers be given access to linkage mechanisms through which they can articulate their problems and needs. Linkage mechanism is used to channel information between groups and to conduct required tasks in the process of getting relevant technologies to farmers (Swanson, 1997 mentioned by Uwe Jens Nagel at http://www.fao.org/docrep/ W5830E/ w5830e04.htm). It is also used:

- To network all concerned and bring them together to share ideas, materials, information and expertise by the development chain.
- To institutionalize the mechanisms of information-flow, material-flow and provide necessary services.
- To ensure continuity in the absence of persons.
- To maintain continuous flow of updated information to the client system.
- To meet the unforeseen circumstances and contingencies like floods, cyclones and other natural disasters (drought, pest outbreaks, etc).

The true test of linkage is the achievement of the ultimate goal of increasing production, productivity and profitability within the overall context of national economy. Linkages can be classified into three types:

i) ***Production linkages:*** to maintain regular flow of information from its source to the client system through government and non-government agencies including input supply and services.

ii) ***Technology generation linkages:*** to develop new technologies to meet the emerging problems faced by the client system as well as contingency measures to manage pest-outbreaks and natural calamities.

iii) ***Post-production Linkages:*** with marketing agencies both for domestic and export lmarkets to dovetail the products and services to suit the consumer preferences. Linkages with storage, transportation, packaging, and agro-industries helps for value addition. Linkages with various commodity-interest groups helps to identify the bottlenecks and get the feedback to improve the efficiency at all levels.

Reasons for linkage failure: In spite of several interventions through various extension and research programmes, still many gaps exist in research-extension-farmers linkages. These are mainly due to organizational, functional and/or communication gaps which often lead to research results not reaching farmers or being irrelevant to their needs. These linkage problems among major stakeholders in agricultural development are extremely complex involving technical, environmental, organizational and human factors. The reasons for poor linkages between research and extension have been categorized into political, technical, organizational and other problems (Seegers and Kaimowitz, 1989).

- *Political problems:* These include the following.
  - Lack of external or internal pressure on institutions and personnel to achieve high levels of performance.
  - Lack of external pressure from national policy makers, foreign donors, farmers or the private sector.
  - Except in exceptional circumstances such as disease-outbreaks, major crop shortfalls, etc.,
  - Intervention by national policy-makers is generally minimal.
  - Pressure from resource-poor farmers is also negligible mainly because of their inability to organize themselves.
  - Participation of the private sector is insignificant in resource-poor areas, and the pressure exerted by resource-poor farmers on research and extension is also negligible.
- *Technical problems:* These include the following.
  - Too much emphasis on specialization.
  - Lack of professional ethics and values.
  - Lack of independent verification mechanism to check the linkages.
- *Organizational Problems:* These are as follows.
  - Differences in orientation and work- style.
  - Heads of institutions treat the linkages with least priority.
  - Researchers tend to undertake the projects of their interests and in academic area(s) of their interest.
  - Researcher and extension personnel lack the system's perspective.
  - Responsibility of conducting adaptive research, communication of research results, or feedback from users to researchers is not generally assigned to individuals.
- *Motivational and incentive problems:*
  - Little/no incentive to perform linkage activities.
  - Rewards for journal publication may be higher than those for performing linkage activities.

- No recognition for the scientists working in training function.
- In-house interaction in planning, implementing and assessing the training function is lacking in research institutions.

➢ *Resource problems:* Sufficient financial resources for linkage functions such as publications, testing of research results and training of extension workers are often lacking.

➢ *Communication problems:* These include the following.

- Extension workers perceive that the researchers are developing technologies which are not useful at farm level.
- Researchers question extension workers' capability to understand research outcomes, and communicate properly with farmers.
- Poor documentation skills of the extension workers and negligible feedback on problems and technology.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

7) Write in brief about Strategic Research and Extension Plan (SREP) which is the mandate of Agricultural Technology Management Agency (ATMA).

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8) Explain the significance of farmers' organization in community-driven model of extension.

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9) Mention the types of farmers' organizations as well as the types of their linkages.

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6.7 INTEGRATED MODEL – PUBLIC-PRIVATE PARTNERSHIP MODEL

Integrated models and approaches aim at influencing the entire rural development process. They are generally implemented in the form of large-scale and foreign-funded projects aiming at alleviating mass poverty in rural areas on the basis of "a simultaneous improvement in the utilization of natural resources and of human potential" (Rauch, 1993, p.6).

The concept underlines typically multi-sectoral measures to promote production with a strong emphasis on self-help. Unlike the small self-help groups discussed in the preceding sections, there are strong and institutionalized linkages with research and other services. While the clientele is quite different, farms are highly modernized and extension advice is demand-driven and the overall extension policy is defined by the government.

The public extension system is undergoing a transition due to financial constraints, inadequate manpower availability, inadequate knowledge base and accountability among the public extension system functionaries. On the contrary, the private extension system has very limited reach in terms of farmers' and crops, covering limited geography, services provided on payment basis with inadequate network to reach out to all the farmers. Under such circumstances, the alternative and supplemental efforts with plurality of institutions like Public Extension System, NGOs, Farmers' Organizations, Para-technicians, Agri-business Companies, Corporate Houses, Cooperatives, Input Dealers, Self-Help Groups (SHGs), etc. have become a necessity to augment the supply of quality input and services to the farmers serving entire agri-value chain. In view of this, Government of India has laid adequate focus on evolving pubic-private partnership for agricultural development while implementing the Agricultural Extension Reforms Agenda as delineated in the National Agriculture Policy.

6.7.1 Types of Public-Private Partnership: Need and Nature of Relationships

Partnership Defined: The term 'public-private partnership' is a necessary collaborative effort between the public and private sectors contributing to one or

more functions like planning, resources and activities as required for accomplishing a shared goal set out by the partners. The public-private partnership may occur at any one or more stages in the process of extension, production, procurement, processing, marketing, etc., depending upon the stated objectives or goal of partnership.

6.7.1.1 Need for Public-Private Partnership

Over the last one and a half decade, the globalized market forces and competition from local and international competitors have increasingly compelled the public and private systems to seek strategic cooperation and partnership to complement their business, social and developmental goals. The public-private partnerships for Indian agricultural development, particularly in the post-WTO scenario, can no longer remain a developmental fad and therefore, recognized a promising approach to achieve agricultural advances for farmers.

Client-based and client-controlled extension: One way of dealing with the shortcomings of large extension systems has been to localize extension and utilize the self-help potential of rural groups. Often organized by outsiders, these decentralized approaches are in a better position to serve the needs of specific target groups, notably those in disadvantaged positions. Close contact with their clients and intimate knowledge of their life situations are essential for the planning of problem-oriented extension activities. Local personalities are identified who take over leader functions once the external (non-governmental) organization withdraws. The principles of these organizations are awareness, empowerment, participation, mutual benefit and self-help.

6.7.1.2 Types of Public-Private Partnership and Nature of Relationship

The nature of relationship in public-private partnership may be different in different partnerships as given below along with some examples.

1) ***Public and Public:*** Andhra Bank has entered into an MOU with the National Collateral Management Services Ltd (NCMSL), and promoted by the National Commodity and Derivatives Exchange of India (NCDEX) for providing loans against farm produce.

2) ***Public and Private:*** State Bank of India has signed a Memorandum of Understanding with Dabur India to finance farmers for cultivation of medicinal and aromatic crops in Uttaranchal under contract-farming arrangement. Food Bazars of Pantaloon has entered into an understanding with NAFED for supply of onions to its grocery retail outlets.

3) ***Public and Individual / Group of Farmers:*** Agricultural Technology Management Agency (ATMA), Chittoor has facilitated the District Poultry Association to reach an understanding for purchase of maize from the growers. The Poultry Association gave a written agreement to purchase the maize at minimum support price of Rs.485 per quintal. The Poultry Association also agreed to supply 2 MTs of poultry manure free of cost to the maize growers. To boost up the maize crop, ATMA, Chittoor had supplied Maize seed free of cost to an extent of 400 acres in Kharif, 2002 and for 1000 acres in Rabi, 2002-03, as an incentive. Technical support has also been given by the ATMA and Block Technology Team (BTT) Officers for cultivation of maize.

4) ***Private and Private:*** The Morarka Rural Research Foundation in collaboration with Narco Exports is to bring out 37 varieties of organic farm produce from the Shekhawati region in Rajasthan to Delhi and the National Capital Region (NCR). Their retail outlet, Food Shoppe in Gurgaon will also stock vegetables, fruits, pulses, cereals, oilseeds, spices and herbs from the Shekhawati's organic farms. To tap the niche market, the Foundation has planned to make the organic produce available at the doorsteps of the consumers on a weekly basis under a 'Box Scheme'. Excel Crop Care and Parle Group have come together in Bheraich district of UP where Excel Crop Care under 'Excel and Me' Programme provides input and advisory services to the farmers through Village Agriculture Practices and Parle finally purchases the produce from these farmers.

5) ***Private and Individual / Group of Farmers:*** 'Excel and Me' of Excel Crop Care Ltd. launched the concept of FSA integrated crop management and pest management discouraging mindless use of chemicals, combining indigenous and exogenous technological knowledge. 251 villages are covered all over India and the farmers are provided necessary support in terms of timely advice, inputs or services by Village Agriculture Practitioner (VAP) who hails from the local area and trained in participatory training techniques. The services by VAP includes conduct of soil health camps and soil analysis, and reports are supplied at the door-step of the farmer. The knowledge-sharing portal for VAP and others is created to post, share and access the data and knowledge online.

6) ***Mix of three stakeholders viz. public, private and farmer groups*:** Different stakeholders may come together in different combinations based upon the interest and need of the partnership. In order to understand the concept of partnership, one needs to make a distinction between the programmes carried out by the Governments (public system) for the benefit of the farmers without any contribution in cash or kind from them. It is basically a supply-driven model. Any supply-driven model theoretically cannot be conceived as partnership. The partnership necessarily has to meet the parameters on supply-demand continuum in which public, private and farmers' groups are involved. The Government programmes and projects where group of farmers contribute to avail services may also be viewed as public-private partnership.

6.7.2 Some Cases/Examples of Public-Private Partnership

Some cases of public-private partnership are given below.

6.7.2.1 Excel-Farmers Partnership

A case of partnership initiated by Excel Crop Care Limited (ECCL) is an experiment called 'Excel and Me' where 'me' represent the farmers. ECCL extended its network to the farmers to give services related to farm advisory, inputs and crop agronomy, which led to improvement in the economic and overall living conditions of farmers in the given geographical area of their operations.

Objective: The main objective of the ECCL is to minimize the cost of cultivation of crops and to improve production and productivity by providing advisory services and package of practices for increasing the income of farmers.

Excel and Me: In a nutshell, 'Excel and Me' promotes a blend of modern technology, traditional farming methods and a systems approach to agriculture, wherein Integrated Pest Management (IPM) and Integrated Crop Management (ICM) were consistently promoted and propagated for both long-term and sustainable development. Excel had also initiated a comprehensive system of modern farming technique balancing the economic production and environment related factors at farm level. As a result of these measures farmers are able to take advantage of increased productivity and reduced costs. Under this programme, Excel has selected 12 states, 25 locations, 20 crops and cover 251 villages in the country. It identifies the location-specific problems of the farmers and then works with them by adopting "ICM Plots" where the work starts from correct practices in land management, water management, soil management, and pest, disease and post- harvest management. This integrated approach has reduced farmer's cost of cultivation and increased the productivity and profitability. Excel appointed local Agriculture graduates as Village Agriculture Practitioners (VAPs) and located them at their village itself to handle the cluster of villages by visiting and providing services to the farmers. The VAP has been trained in Participative Training Techniques (PTT) that cover various aspects like brainstorming sessions, instruction plans and talks, skill-transfer and other interactive programs. These ensure that the farmers are totally involved in the discussions and all their problems come forth and the entire team gets involved in analyzing and trouble-shooting techniques. Critical problems are then discussed with agriculture scientists and optimum solutions are formulated. The VAP then helps the farmers implement the solutions in their farms in a much better way.

Gyan Kendra: Gyan Kendra, is the place where farmers come and meet the VAP for the farm advice and other inputs. Gyan Kendras are established at centrally located place of the selected cluster of villages. The center consists of a soil testing laboratory, library, crops photo gallery, and a computer that is loaded with information on cultivation practices, diseases and management practices. A computer operator and VAP are available in this center to provide the services. The center provides the following services to the farmers.

- Soil testing facility.
- Information about ICM/IPM practices.
- Information about beneficial insects.
- Identification of insects and diseases.
- Knowledge about bio-insecticides.
- Technique of good quality compost preparation.
- Information about good insecticides/pesticides.
- Information about farm inputs and implements like sprayers and nozzles, etc.
- Information about grain storage.
- Information about control of insects and rodents in grain.
- Library facility.

The above services are provided through the following, among others.

Farmers Data Bank: At Gyan Kendra, a farmer's data bank is developed by collecting the base-line information of all the farmers covered in 'Excel and Me programme. The database gives the complete insight of the area and the practices

followed by the farmers. The information against the names of the farmers, the crops they grow, acreages, methods of cultivation, management practices, methods of storage of grains, etc is also the part of database.

Excel retail outlet: The 'Excel and Me' not only offers advice to the farmers for crop cultivation but also provides quality inputs at a wholesale price to grow the crops for better yields. In view of above, Excel has started a retail outlet at the Gyan Kendra to provide all inputs to the farmers at one place. The farmers who come for the Gyan Kendra not only receive proper advice but also get farm machinery on hire. At Gyan Kendra, the trained persons for spraying are available on hire basis who also teach the methods of spray to farmers.

Role of public institutions: Presently there are no formal arrangements between Excel and other public institutions like KVK and Department of Agriculture. However, the informal collaborative efforts are made to provide proper advice to the farmers. The KVK scientists are invited by the Excel in the farmers meet to share the latest research and practices. The scientists of Indian Vegetable Research Institute (IVRI), Varanasi, have provided the advice to grow vegetables in 'Excel and Me' villages on the request of ECCL.

6.7.2.2 Excel-Parle-Farmers Partnership

Having seen the tremendous response of farmers in 'Excel and Me' programme at Varanasi, Parle joined hands with Excel at Bahraich and initiated a 'Parle-Excel-Farmer' partnership. Behraich is a backward district of Uttar Pradesh with sugarcane as a major crop in 267 villages covering seventy thousand acres under sugarcane cultivation. The major drawback of the farmers of sugarcane is that 96% of them grow rejected varieties of sugarcane with poor farm practices and terribly low yields. These two corporate partners aimed to cover 7000 ha. area under sugarcane production in the year 2004-05 and achieved 15340 ha in the very first year itself.

Excel-Parle-farmer programme has resulted in:

- increase in the yield by using improved varieties of sugarcane and package of practices creating awareness about soil health and increase in the organic carbon content in soil.
- creating awareness of using bio-compost and reduction in chemical fertilizer use.
- creating awareness about the application of right inputs in right proportion, thus reducing the cost of cultivation.

The Excel-Parle venture has fructified in raising the living standards of the farmers:

- ECCL provided extension service to the farmers and Parle provided all the infrastructure facilities required for knowledge transfer.
- Excel encouraged the farmers to adopt hybrid varieties of sugarcane while Parle has provided 13 acres of land as research farm for conducting trials and demonstration of improved varieties.
- The ECCL took responsibility of conducting trials and demonstration on various improved varieties on the selected plots for the farmers and also

some demonstrations were conducted at farmer's fields so that trust-building can be done very easily. Parle has established seven Kisan Seva Kendras (KSKs) at Parsendi, Kundasan, Badrauli, Marocha, Nandwal, Fakharpur and Bednapur locations within the catchment area of the factory. The KSK comprises of a training hall, library, soil testing laboratory, and a retail counter where all farm inputs and general grocery items are also sold. An Agriculture Development Officer (ACDO) is the in-charge for the center operations supported by 1-3 supervisors and an attendant. The ACDO and supervisors are graduates in agriculture. Each supervisor is responsible for extension activities in 10-20 villages depending on the size of area allotted to the center. The farmers meet the ACDOs at the centers to seek advice. Most of the time, the supervisors visit their fields and give them advice.

- Excel has identified the areas where farmer needs immediate advisory and other help. These areas are: termite management, use of improved varieties and conversion of crop biomass. For this Parle has provided 3 acres of space for accumulation of press mud which can be converted into compost and distributed to the farmers. The best agronomical practices have been followed in this area. Paired-Row-Technique is a method of raising field crop, which provides good microclimate or the proper growth and development of crop. In this method, between the two rows proper circulation of air current and penetration of sunlight reduces the chances of development of insect-pests and diseases. The company also provides training to the local rural youth in spraying techniques and quantity of application of such inputs. The farmers also can hire the services of trained persons for spraying available at Gyan Kendra.

- Parle works with three sugarcane societies in this region. They are: 1) Jarwal society, 2) Government society, and 3) Nanpara society. The farmers will register with concerned society by paying Rs.221 as the membership fee. Once the farmer becomes a member of society, the farmer's land will be surveyed and the hybrid varieties of sugarcane will be supplied to the farmers on cost-to-cost basis. Excel provides the extension services to the farmers. The services of the Excel scientist are made available within 1 hour of a call made by the farmer. From time-to-time the farmer's fields are visited by the extension persons of KSK who provide suitable advice to them. The farmer crop season is closely monitored by the Parle-Excel and when the harvesting time comes, the farmer is given a ticket. The farmer takes his harvested crop to the nearest KSK where weighting machines are available. The crop is accurately weighed and the same is delivered to the factory. The company deposits the value of the produce in bank account of the farmer. The transportation charges are also paid to the farmers by the company.

6.7.2.3 Uttam Bandhan – A Quality Bond of Partnership

To meet the upcoming challenges in agricultural extension and to overcome the stumbling blocks, and strengthening the reach of quality extension services to farmers, Chambal Fertilizers and Chemicals Ltd decided to join hands with public organizations NGOs, Farmers' Groups and others so that better services can be provided to the farmers within their available resources. Driven by the belief that farmers must grow in order to make the agriculture sector and nation to grow, Chambal conceived Uttam Bandhan by going beyond its business of production and sale of urea with a view to provide personalized and customized

services to the subsistence farmers and enable them reap the benefits of new technologies, products and services in the crop production and protection.

Objectives: Uttam Bandhan has the following three-fold objectives.

i) To enhance the income of the farmers.

ii) To enhance the reputation of the organization by building trust among the farming community.

iii) To help improve the quality of living of the farmers that goes beyond agriculture by enhancing skills and creating greater avenues of income from other sources.

In order to realize the stated objectives, Uttam Bandhan served the farmers by making them aware of the recommended doses of various inputs by result demonstration, soil testing and accordingly recommending fertilizer usage, organizing training programmes at local research centres, making wholesalers and retailers aware of the quality of the fertilizers and laws of sales and distribution, land and water management and also providing agriculture related information through their website www.uttamkrishi.com and 'Hello Uttam' on the lines of Kisan Call Centre.

The Partners: The following partners have come together to realize Uttam Bandhan (Quality Bonding) objectives in Sangrur, Bhavanigarh and Sunam Blocks of Sangrur in Punjab.

- Farmers and Farmer Interest Groups.
- ATMA, Sangrur.
- Public Sector Departments (Agriculture, Horticulture, Animal Husbandry, Dairying, Fisheries, DRDA, KVKs, ATMA, Sangrur) and their subject matter specialists and extension functionaries.
- Chambal Fertilizers and Chemicals Ltd.

Chambal Fertilizers and Chemicals Ltd. has evolved a tie-up with other companies like Monsanto, Dupont, Bayer, Sumitomo Takeida, Syngenta, Gharda, Nagarjuna Fertilizers for pesticide range and a number of other inputs like SSP, DAP, Potash, Zinc, Bio-fertilizers, Gypsum, etc. to provide single-window services under Uttam Bandhan. The ATMA, Sangrur provided the linkages with Farmers' Interest Groups (FIGs), Knowledge Linkage with KVKs and technical and programmatic / schematic support from Agriculture and allied Departments specifically for the crops like potato, citrus, sugarcane, etc.

Memorandum of Understanding: The Memorandum of Understanding between ATMA and M/s Chambal Fertilizers and Chemicals Ltd. was signed and laid emphasis on the following specific areas for promotion of agricultural extension for farmers to improve production and productivity of their crops and realise remunerative prices.

i) Intensification and diversification of farming systems.

ii) Establishing linkages with market for better price of farm produce to farmers.

iii) Soil-testing and advisory services.

iv) Organizing awareness camps for technology promotion.

v) Organizing animal health check-up camps.

vi) Publication of literature in regional language to promote precision-farming.

vii) Promoting group approach in agriculture development activities.

viii) Participatory planning with all stakeholders for agriculture development.

ix) Dissemination and extension of agricultural services using IT at FIAC. established by ATMA at block level.

x) Promotion of rural-based value addition of agri-allied produce.

Chambal has provided all reporting forms for soil testing and also established two soil testing laboratories. An annual outlay under Uttam Bandhan initiative is stated to be of Rs.5 crores. It is important to mention that Uttam Krishi Sewak (UKS) provided an opportunity for unemployed youth to be self-starters.

Process of Partnership: A meeting to explore the scope of participation of private companies / organization for strengthening the agriculture extension services for the benefit of the farmers on mutually agreed terms and conditions was held on October 26, 2005 at Sangrur. The representatives from ATMA, Sangrur, Chambal, MANAGE and Ministry of Agriculture and Cooperation, GOI have participated in the meeting. The participants from various private companies and organizations were made aware of Agriculture Technology Management Agency (ATMA) as an institution, its role, mandate and activities executed through various stakeholders for the welfare of the farming communities. The participants were also apprised about the following activities which were already undertaken by ATMA, Sangrur in partnership with other private players.

- Allotment of land by Panchayat for vermin-composting and nursery-raising.
- Planting of medicinal plants with buy-back arrangement with Reliance Group.
- Marketing of ATMA products / produce through tripartite arrangement involving ATMA, Red Cross and Private Entrepreneur.
- Operationalization of FIACs.
- Hybrid seed production of chilly and tomato.
- Technology dissemination.

They were assured full cooperation if they join hands with ATMA for strengthening the agriculture extension services. M/s Chambal Fertilizer and Chemicals Ltd had shown interest in joining hands with ATMA under the Public-Private Partnership programmes in carrying out agriculture extension activities.

Benefits and successes: These include the following.

- The fear of losing grip and control and initial threats to the instance of public extension system due to the entry of private enterprise in the public extension services domain is waned away slowly.
- Public extension functionaries have realized that it is one of the best processes for the operationalisation of the extension mechanism for technology dissemination for the overall benefit of the farming communities.

- It provided better opportunities and linkages for farmers-researchers-extension workers and Chambal to succeed together. The access of extension functionaries to farmers have improved through the coordination by ATMA.

- The reimbursement of expenditure claim for the activities executed by Chambal instead of advancing the money for such activities by ATMA have increased the mutual faith of the partners.

- Coming together at the common platform for technology-sharing and dissemination to the common clients have increased the level of mutual understanding for the execution of similar programmes in future for the benefit of the farming communities.

- Guided farmers to follow a practice of balanced inputs, crop rotation and diversification, value-added crops, seed production, soil mapping, soil health, personal health care, and rural infrastructure and, in a nutshell, of good quality of life.

- The bottom-up approach was followed in this experiment where a farmer identifies his problems and defines the services required with the help of UKS which were then addressed within the available and affordable resource of farmers.

- The UB has succeeded with the help of ATMA, Sangrur as it was able to forge an organic linkage on continuous basis with the farmers through UKS. The feedback system between the farmers and UKS is the USP of this partnership which has resulted not only in trust- and relationship-building but also generating tangible monetary gains.

6.7.2.4 Joint Forest Management Programme

Government of India on June 1, 1990 issued guidelines to the state governments for involving local communities in the protection and development of the degraded forests. Based on this, the Joint Forest Management (JFM) programme has become popular and been widely adopted in twenty two states of the country. As on 1.1.2000, there were 36130 JFM Committees managing 10,248,586.41 ha. of forests in these 22 states. To make JFM programme grow sustainably and to have a comparatively uniform policy in various parts of the country to effectively monitor the impact of the JFM programme on protection and development of forests, a *Joint Forest Management Cell* (JFMC) was created in the Forest Protection Division of the Ministry of Environment and Forests.

The ***primary objective*** of JFM is to provide a visible role to the local communities in planning, management and protection of forests and to give them a share in the benefits from these forests. On operational parameters, JFM is a concept of developing partnership between forest department and fringe forest-user groups on the basis of jointly defined roles and responsibilities. JFM in India is gradually emerging as a powerful tool of sustainable forestry. It recognises the livelihood and sustenance needs of the people through the principle of 'care and share'. The concept of JFM is to establish grassroots community-based institutions for protection and management of the forests. The programme aims at empowering local people for their active participation as partners in the management of forest resources and sharing the benefits derived from its protection and management.

The JFM approach optimises the returns, minimises conflicts and links the forestry development works with over all development of the land-based resources. It also aims at improving technical and managerial capability available at the grassroots level. Joint Forest Management (JFM) programme in the present form can be traced to the Arabari experiment initiated by foresters in the state of West Bengal, the strong feedback on which had led to its incorporation in the National Forest Policy of 1988.

Strengthening of JFM: The JFM programme in the country was reviewed by the Government of India from time to time in consultation with the State Governments, NGO's and other stakeholders in view of several emerging issues. In order to further strengthen the programme based on the review, the State Governments may take action on the following suggested lines.

- Legal backup to the JFM committees.
- Preparation of micro-plan in JFM areas.
- Conflict resolution in the functioning of JFM committees.
- Recognition of self-initiated groups.
- Encouraging contribution from final harvest for regeneration of resources.
- Effective monitoring and evaluation.

Prospects: In a period of about ten years, JFM programme has been widely accepted and well adopted all over the country. The area covered under JFM programme and the number of JFM committees have increased manifold. However, success of the programme mainly depended upon the commitment on the part of all the stake-holders for the cause of forest protection and development. Various issues as outlined in the National Forest Policy which are linked to participatory management of forests such as enhancing productivity, limiting the use of resource, preventing damage from fires and illicit felling, grazing, encroachments and financial support received immediate attention. The other areas in which JFM Cell proposes to work in future are: impact of JFM on productivity, on natural and artificial regeneration, gender issues, relationship between JFM Committees and the panchayat, inter-sectoral linkages, issue of equity, conflict resolution, sustainability of programme, employment generation, sharing of benefits and integrated rural development, among others.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

10) Define partnership in the context of public-private partnership model.

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11) Mention different types of public-private partnership.

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12) Name some cases of public-private partnership projects.

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6.8 LET US SUM UP

In this Unit we have presented you an overview of organisational streams of extension along with broad nature of extension goals and different alternative ways of or approaches to organizing extension. We have highlighted different models of extension namely first-line extension model, conventional top-down or bureaucratic model, universities extension model, community model or community-driven model and integrated model – public-private partnership model with due emphasis on different aspects and issues. Under each of these models, we have touched upon relevant institutions/centres involved in implementing selected programmes/schemes/projects. Under integrated model, in order to highlight the role and importance of public-private partnership, we have presented some case studies as well.

6.9 ANSWERS TO 'CHECK YOUR PROGRESS' QUESTIONS

1) Following are the three broad organizational streams of extension.

   i) *The first-line extension system:* It comprising mainly the Indian Council of Agricultural Research (ICAR) Institutes and the Agricultural Universities.

ii) *Extension system of the Ministries:* This comprises the system of the Ministry of Agriculture and the State Departments of Agriculture as well as of the Ministry of Rural Development and the State Development Departments.

iii) *Development extension work* done by the Non-Government Organizations (NGOs), business houses, etc.

2) The two end points of the continuum of goals of extension could be marked as technology-transfer and human resource development, suggesting either a rather narrow technical or a broader socioeconomic view of development.

3) The objectives the projects under first-line extension model include the following (Prasad, Choudhary and Nayar, 1987).

i) Organizing first-line demonstration by the scientists to show the maximum genetic production potentiality of latest agricultural technologies to farmers and extension functionaries without loss of time.

ii) Organizing extension programmes in selected/limited areas, specially those around institutions and their stations/sub-stations, to serve as extension laboratories for field training and teaching programmes.

iii) Involving large number of scientists in the field work through these projects for rapid feedback for improving research and educational programmes.

iv) Testing technologies in field conditions.

v) Developing appropriate extension approaches and methodology for field work.

vi) Serving the farming community by helping them to increase production and productivity, and to generate employment and income.

4) Some of the programmes under first-line extension are listed below.

i) All India Coordinated Project on National Demonstrations.

ii) Operational Research Project.

iii) Krishi Vigyan Kendra (Farm Science Centre).

iv) Lab-to-Land Programme.

5) The major drawbacks or failures of the conventional Ministry-based extension model are as follows.

- Ministry-based extension has been unable to reach a majority of its potential clientele for economic, socio-psychological and technical reasons. Even dramatic quantitative increase in personnel — more staff closer to the farmer — has not produced manageable client-to-agent ratios. In recent years, the trend has even been negative. Financial constraints have produced a strong pressure to reduce staff, and the field level has been hit hardest.

- The hierarchical and highly bureaucratic way in which the services are organized had hampered a full realization of the potential.
- For the ministry, extension has never been a purely educational activity. Non-educational activities included anything ranging from statistical data collection to attending to foreign visitors, among other things.
- Many extension workers preferred to select more responsive section of their clientele or they got simply prejudiced against certain target groups. Adequate and location-specific answers to farmers' problems are often not available because it has not been a research concern or the solution has simply not reached the field.
- Decision-making and management are highly centralized and formalized and lacked in control from below. Extension fieldwork, on the other hand, demands location-specific, flexible, and often quick decisions and actions.

6) One of the essential features of the agricultural university system of extension is the acceptance of the philosophy of service to agriculture and rural community. To fulfill this commitment, each agricultural university needs to have adequate and efficient extension setup for the speedy and effective communication of new knowledge and technology to the extension agents and to the farmers. The significance of extension education setup in the agricultural university in general can be understood from the following.

   i) *Teaching in extension education:* This is to produce professionals for teaching, research and field work through a sound, systematic and integrated under-graduate and post-graduate teaching in extension education.

   ii) *Research in extension education:* This is to undertake research on various facets of extension with a view to enrich programme-formulation and operation and to develop new methodology and approach for speedy transfer of new technology to farm and farm homes.

   iii) *Application of extension education:* The field extension work of the agricultural universities is designed to: a) plan, organize and conduct production and problem-oriented training of various types and durations for extension personnel; b) collect, process and disseminate latest research findings to extension personnel and extension clientele through appropriate methods and media; c) produce information materials and teaching aids for extension personnel, trainers and farmers; d) carry out limited frontline demonstrations based on latest research findings and to identify field problems as feedback to research departments; e) provide effective farm advisory service to farmers, farm women, farm youth, extension personnel, bankers, input dealers and manufacturers, voluntary farm organizations and others concerned with agricultural development; and f) undertake special surveys and carry out operational research projects to test the applicability of findings under different agro-climatic and socio-economic conditions in different parts of the State.

7) *Strategic Research and Extension Plan (SREP):* Agricultural Technology Management Agency (ATMA) is mandated to develop a demand-driven, situation-specific, multi-actor oriented Strategic Research and Extension Plan (SREP) to accelerate agricultural development in the district. The SREP is the process of identifying research and extension gaps in agriculture and allied sectors. It suggests an appropriate strategic plan for agricultural development of the district. In the strategic research and extension planning the concerns and emphasis will be on:

- Future — long-term dynamics is its concern; not day-to-day task.
- Growth -- direction, extent, pace and timing of growth.
- Environment -- the fit between the organization and its environment.
- Strategy — strategy-building is its concern; not the operational activities.
- Integration — Forging integration is its concern; not a particular function.
- Creating core competencies — creating competitive advantages, long-term, sustainable, organizational capacity is its concern.

Based on the research-extension strategies given in the SREPs, block / district level plans are developed by ATMA institutions. The State Extension Work Plan developed at state level is a consolidated activity-wise plan incorporating all the district level plans and the state level activities.

8) *Significance of farmers' organization:* Farmers Organizations (FOs) are seen as a useful organizational mechanism for mobilizing farmers' collective self-help action aimed at improving their own economic and social situation and sustainable development of their communities with focus on not only agriculture but also allied sectors thus leading to empowerment of the members of farmers groups. Such organizations were perceived to have an ability to generate resources from their members and operate at different levels from the local to the national through adaptive research and extension, overall priority setting and multiple linkages with the technology and marketing systems. Farmers' organisations provide space for participation, build group-cohesiveness and solidarity, contribute to group members' ownership of the issues and solutions, promote mutual support and social support system, act as platform for building a sense of community, increase self-confidence and learning together, provide a sense of equality and empower the individuals and the groups concerned. Groups with common interests can secure access to services that individuals cannot, such as training, credit or equipment. They enable the individual farmers of the group to learn, decide and act together in responding to marketing concerns, as there are clear economic and other benefits of working in groups. These include the ability of groups to buy inputs in bulk, or access more distant markets, and access to information. Working together can increase members' bargaining power, which helps to share, and lower risks and costs. Farmers' groups are an important way for farmers to become recognized economically, socially and politically. With increased emphasis on farmer-led or demand-driven development processes, group is an important tool that enables farmers to lead the way and get more power. By building on what they have (including knowledge, interests and obligations), organising them is an important way

for farmers to have a voice and increase their influence. This is vital when working towards improving their own social, economic and environmental conditions through lobbying and advocacy activities.

9) Farmer organizations (FOs) can be grouped into two types, viz. i) Community-based resource-orientated organizations, and ii) Commodity-based and market-orientated organizations.

   Linkages of formers' orgaisations can be classified into the following three types:

   a) *Production linkages:* to maintain regular flow of information from its source to the client system through government and non-government agencies including input supply and services.

   b) *Technology generation linkages:* to develop new technologies to meet the emerging problems faced by the client system as well as contingency measures to manage pest-outbreaks and natural calamities.

   c) *Post-production linkages:* with marketing agencies both for domestic and export markets to dovetail the products and services to suit the consumer preferences. Linkages with storage, transportation, packaging, and agro-industries helps for value addition.

10) The term 'public-private partnership' is a necessary collaborative effort between the public and private sectors contributing to one or more functions like planning, resources and activities as required for accomplishing a shared goal set out by the partners. The public-private partnership may occur at any one or more stages in the process of extension, production, procurement, processing, marketing, etc. depending upon the stated objectives or goal of partnership.

11) Different types of public-private partnership can be as follows. i) Public and public, ii) Public and private, iii) Public and individual / Group of farmers: iv) Private and private: v) Private and individual / Group of farmers: vi) Mix of three stakeholders viz. public, private and farmer groups.

12) Some Cases/Examples/Projects of Public-Private Partnership are: i) Excel-Farmers Partnership, ii) Excel-Parle-Farmers Partnership, iii) Uttam Bandhan – A Quality Bond of Partnership, and iv) Joint Forest Management Programme.

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UNIT 7 DYNAMICS OF DEVELOPMENT: THEORIES OF DEVELOPMENT

Structure

7.0 Introduction

7.1 Objectives

7.2 Classical Theory of Economic Development

- 7.2.1 Assumptions of Classical theory
- 7.2.2 Features of Classical theory
- 7.2.3 Critical Appraisal

7.3 Neo-Classical Theory of Economic Development

- 7.3.1 Features of Neo-Classical Theory
- 7.3.2 Neo-Classical Economists and Underdeveloped Countries
- 7.3.3 Critical Appraisal

7.4 Keynes' Theory of Economic Development

- 7.4.1 The Consumption Function
- 7.4.2 The Inducement to Invest
- 7.4.3 The Rate of Interest
- 7.4.4 The Concept of Multiplier
- 7.4.5 Tools of Keynesian Economics and Underdeveloped Countries
- 7.4.6 Critical Appraisal

7.5 Karl Marx's Theory of Economic Development

- 7.5.1 The Materialistic Interpretation of History
- 7.5.2 The Theory of Class Struggle
- 7.5.3 The Theory of Surplus Value and Capital Accumulation
- 7.5.4 The Concept of Industrial Reserve Army
- 7.5.5 Economic Development under Capitalism
- 7.5.6 Marx's Model and Underdeveloped Countries
- 7.5.7 Critical Appraisal

7.6 Dependency Theory of Development

- 7.6.1 Concept of Dependency Theory
  - 7.6.1.1 Dependency Theory: A Historical International Process
  - 7.6.1.2 Technological Dependence
  - 7.6.1.3 Dependence on Foreign Capital
- 7.6.2 Trade and Unequal Exchange
- 7.6.3 Dualism
- 7.6.4 Critical Evaluation

7.7 Liberal Theory of Development

- 7.7.1 Major Themes of Liberalism
  - 7.7.1.1 Classical and Modern Liberalism
- 7.7.2 Criticism and Support

7.8 Gandhi's Economic Ideas and Development

- 7.8.1 Non-violent Economy
- 7.8.2 Use of Machines
- 7.8.3 Regeneration of Villages
- 7.8.4 Khadi Industry

7.8.5 Doctrine of Trusteeship
7.8.6 Labour Welfare
7.8.7 Food and Population
7.8.8 Exchange Economy
7.8.9 Sarvodhaya
7.9 Let Us Sum Up
7.10 Answers to 'Check Your Progress' Questions
7.11 References

7.0 INTRODUCTION

Economic Development is not a new concept. It has its roots in the past; it has attracted the attention of economists, sociologists and politicians from the ancient times. They propounded various theories of development so as to analyse and explain the mechanism of economic development. In the present Unit, we attempt to present you a comprehensive picture of dynamics of development by focusing on different theories of development – Classical, Neo-classical, Keynesian, Marxian, Dependency, Liberal and Gandhian. The perspective you get of these theories of development will help you in adopting them in different contexts of extension education.

7.1 OBJECTIVES

After going through this Unit, you should be able to:

- Explain different theories of development;
- Analyse and compare different theories of development;
- Assess the relevance of different theories of development to different contexts of extension education; and
- Apply relevant theory in relevant context of extension education.

7.2 CLASSICAL THEORY OF ECONOMIC DEVELOPMENT

In this section the focus of our discussion will be classical theory of economic development. The classical economists were the earliest of those who propounded theory of economic development which is popularly known as classical theory of development. The views of classical economists differ on a number of developmental issues but the essence of their approach was the same. The different classical economists, viz. Adam Smith (1776), Malthus (1798), David Ricardo (1823) and Mill (1848) focused their attention on the factors affecting economic development such as land, population, labour, production, markets and capital accumulation. Their approach to economic development was macro in character. The essential aspects of the approach of classical theorists are presented below.

7.2.1 Assumptions of Classical Theory

The main classical assumptions of this theory included the following.

a) The natural laws are superior to the laws of States. Statutory law or man-made law can never be perfect or absolutely beneficial for the society. It has its favorable effects on the economic progress of a country.

b) The classical theory of economic development is based on the principle of laissez-faire, which requires that the State should not impose any restrictions on the freedom of action of an individual.

c) There is perfect competition.

d) Supply of land is fixed which is used for the production of corn.

e) The production function is subject to the law of diminishing returns.

f) The state of technical knowledge is given.

g) Full employment will exist in the economy.

h) The supply price of labour is given and constant.

7.2.2 Features of Classical Theory

The key features of classical theory are as follows.

i) ***Division of labour:*** Division of labour is the starting point of Adam Smith's (1776) theory of economic development. Division of labour increases productivity of labour through specialization of tasks. When a particular work is divided into several parts and the worker is asked to choose and work on small parts of whole job, his/her efficiency increases as he/she can focus his/her full attention on that particular part only. According to Smith, division of work is an important technique to increase both production and productivity, as it increases the skill of every worker, saves the time and promotes largely inventions of labour-saving machines. In his opinion, the size of the market is an important limitation of the division of labour. Adam Smith (1977) in his book 'Wealth of Nations' points out the following three main benefits of division of labour:

   a) Increase in the dexterity of every worker.

   b) Reduction in the time required to produce commodities.

   c) Inventions of better machines and equipments.

   By division of labour the worker acquires more skills and efficiency which are needed for raising the level of output. Division of labour necessarily leads to exchange of goods, which is in the larger interest of the society and highlights the importance of the individual both at national and international level. In short, division of labour leads to the exchange of goods which, in turn, promotes trade and widens the extent of market. Wide extent of market is an essential pre-requisite for economic development. Wide market leads to increased sales, and increased sales tend to increase the amount of profits which, in turn, promotes more capital formation.

ii) ***Capital accumulation:*** According to David Ricardo (1823) capital accumulation is the main source of economic development. It acts as an engine of growth. The role of capitalist is very important from the economic development point of view, because this class does most of the savings in the country. According to David Ricardo (op. cit): "capital is saved from profits, and high profits are favourable to the accumulation of capital". For Ricardo profit is the primary source of capital accumulation, although among secondary sources he includes wages and rent as well. Now, the question

arises as to what is the source of profit? Profit or economic surplus is the difference between the market value of a finished product and its cost at a subsistence wage level. Since the labourers and land lords could not save much, so the capitalists had to contribute the major share to the economic surplus of the economy.

Capital accumulation depends on two factors. *Firstly,* the capacity to save; and *secondly*, the will to save. However, the capacity to save is more important in capital accumulation as compared to will to save. This depends on the net income of the society i.e. surplus out of total output after deducting the cost of workers subsistence. The larger is the surplus, the larger will be the capacity to save. According to (Ricardo, op cit): "out of two loans, I may save one, out of four I may save three". The accumulation of this surplus depends on the rate of profit.

iii) ***Production function:*** Adam Smith (1776) recognized the existence of three factors of production, namely, labor, capital and land. His production function may be expressed as:

$$Y = f(K, L, N)$$

Where K denotes stock of capital, L represents labour force and N stands for land.

Adam Smith (op. cit.) gave topmost importance to labour as a factor of production as it is the only active factor of production and rest are the passive factors of production. Adam Smith regarded labour as father and land as mother; land is the only instrument which enables the farmer to earn the wages of his labour and to make profits of this stock.

Adam Smith (op cit) has not assumed the concept of diminishing marginal productivity. The production function is subject to increasing returns to scale. In his opinion, with the passage of time the size of market expands in both internal and external economies which in turn will eventually lower down the real cost of production. He asserted that division of labour does not depend merely on technological feasibility; it greatly depends on the extent of the market. As far as the size of market is concerned, it depends on the available capital stock and the institutional restrictions placed upon national and international trade. Thus, accumulation of capital is a pre-condition to increasing division of labour. The regulatory measures against trade have a tendency to restrict the size of the market which obviously limits the division of labour.

Adam Smith (op. cit.) recognizes the importance of technological development for improvement in productivity. However, it is possible only when sufficient stock of capital is available. In other words, he assumed the improvement in productivity would never suffer for want of technical know-how if there is regular flow of requisite capital stock. The person who employs his stock in maintaining labor, endeavors both to make, among his work-men, the most proper distribution of employment and furnish them with the best machines which he can either invent or afford to purchase. His ambition in both these respects is generally in proportion to the extent of his stock of capital or to the number of people which it can employ.

iv) ***Stationary state:*** Almost all classical economists visualize the stationary state at the end of the process of capital accumulation. When once profits start declining, this process continues till profits become zero; population and capital accumulation stop increasing, and the wage rate reaches subsistence level. The economic development too receives a set back and at this stage there is no further increase in capital and, thus, the economy enters a stationary state. However, Mill (1848) has welcomed the stationery state because according to him it leads to improvement in income and large remuneration for labour. But, this is possible only through control on increase in numbers.

v) ***Distribution of National Product:*** The national income is the result of joint efforts made by land lords, capitalists and labourers, who share it in the form of rent, profits and wages. Rent for unit of labour is the difference between average and marginal product or total rent equates the difference between average product and marginal product multiplied by the quantity of labor and capital on land. The wage is determined by wage fund divided by the number of workers employed at subsistence wage level. Thus, out of total corn produced and sold rent has first right and residual is distributed among wages, while interest is included in profits. However, their shares vary as a result of complicated process of economic growth. The capitalist being induced by the desire of earning more and more profits invests more and more in productive undertakings. Consequently, the increasing demand for both land and labor results in higher rents and higher wages and in gradually reducing profits. According to David Ricardo (op. cit.), if we take into account the entire economy, the higher wages will lead to competition in the labour market and will ultimately depress wages of workers at nearly subsistence level; the growth rate of capital stocks and population leads to enhancement of aggregate wages, but not essentially aggregate profits; there will be a downward trend in the rate of profits with the technological improvements; and as regards rent, with the rise of population and stock of capital, the demand for agricultural products as well as for land accelerates causing higher agricultural prices and higher rents in a forward economy.

vi) ***Supply of labour and technological progress determine the level of profits:*** In the classical system, it is possible to identity two main factors which determine the level of profits. These factors are:

a) Supply of labour force depending upon population growth, and

b) Technological progress.

The classical economists thought that the population would grow over time and the supply of land is taken as fixed, and thereby an increase in supply of labour would result in diminishing returns in agriculture. On the other hand, this would raise labour costs and thus it would reduce profits. The classists did not expect increasing returns in agriculture despite improvements in farm technology.

vii) ***The wage is determined by the level of investment:*** The wage fund defined as the amount of money available for paying wages to the hired labourers constitutes the working capital. It is created out of savings. However, both Adam Smith and David Ricardo believed that savings automatically get

converted into investment. Malthus (1798), however, differed from them and asserted that, in the absence of effective demand savings of the capitalists do not find investment opportunities. Keeping these differences in view, the classical position can be correctly stated by saying that wage fund depends on the level of investment rather than savings.

viii) ***Population growth and economic development:*** In his principles of political economy, Malthus (op. cit.) was more realistic in his analysis of population growth in the context of economic development. He believed that population growth was not enough to stimulate economic development in a country, but it was itself the result of the development process. In other words, population growth increases wealth only if it increases effective demand and it is the inverse in effective demand which leads to increase in wealth of a country.

ix) ***Deficiency of effective demand:*** Malthus (op. cit.) was against Say's (1855) law of markets which states that 'supply creates its own demand'. He did not accept his view that there could not be a general over production or glut in the market. As against his views, Malthus believed that the general over production in the economy was possible, because workers get their wages much less than the values they produce and, thus they, as the consumers, cannot purchase all the commodities available in the market. This gap between supply and demand cannot be bridged even by capitalists because of their own desire to save more for more investment for more profits. The deficiency of effective demand leads to fall in prices, saving, investment, employment, out put, and capital accumulation.

7.2.3 Critical Appraisal

The classical theory of economic development is subject to severe criticism from different sectors. The main pillars of criticism are as follows:

1) ***Dependence upon Certain Key Assumptions:*** The classical theory of economic development depends on some key assumptions which do not seem to be valid in the light of the experience over past two centuries. For example, rates of population growth have steadily declined in Europe and North America on account of decline in fertility rates. Contrary to which the classical economists had visualised that capital has become an important input in agriculture and is now increasingly substituting land.

2) ***Ignores Middle Class:*** The whole classical analysis was based on the socio-economic environment prevailing in Great Britain and certain other parts of Europe. It assumed the existence of a rigid division of society between capitalists and labourers and, thus, totally neglected the role of middle class which provides necessary impetus to economic growth. It did not come to their mind that the major source of savings in an advanced society was the income receivers and not the property owners and the capitalists.

3) ***Undue importance to laissez-faire policy:*** The classical theory of economic development had laid undue emphasis and importance on laissez-faire policy. However, in the modern world no economy can function without the assistance of the State in one form or the other. The State has assumed an important role in accelerating capital accumulation in recent years.

4) ***Wrong notion about wage rate subsistence:*** According to classical economists, when wage fund is enlarged, the wage rate temporarily rises above the subsistence level inducing the labourers to have more children, which eventually brings down the wage rate back to the subsistence level. However, this theory has been completely rejected in recent times, particularly in view of the fact that in advanced countries wage rate is never found to be at the subsistence level nor it has led to increased rate of population growth.

5) ***Less importance to technological progress:*** The classical economists have utterly failed to visualise the importance of technological progress in the economic development of a country, whether it is agricultural sector or industrial sector the economic development of a country depends a lot on the technological progress.

6) ***Malthus population theory is not operative:*** Most of the classical economists believe that population increases at a faster rate as compared to means of livelihood. However, the Malthus theory of population has not operated in developed countries like Britain, France, Germany, the U. S. A., etc. The rate of increase in population in advanced countries has actually been going down.

7) ***Wrong notion as to stationary state:*** Almost all classical economists visualize the stationary state as the end of process of capital accumulation. However, it is a wrong notion. Stationary state of production and capital accumulation does not mean a stationary state of human improvement.

8) ***Law of diminishing returns not operative:*** According to classical economists after some time law of diminishing returns becomes operative in agriculture. However, due to technological progress rapid increase in agricultural produce takes place and thereby law of diminishing returns does not become operative in developed countries.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

1) Briefly explain the essential aspects of classical theory of economic development

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7.3 NEO-CLASSICAL THEORY OF ECONOMIC DEVELOPMENT

The main Neo-Classical Contributors are: Robert M. Sollow (1956), Nicholas Kaldor (1957), Meade (1962), Johnson (1964), Joan Robinson (1956), Schultz (1964), and Bauer (1972). Neo-Classical economists have made a significant contribution to the understanding of the process of economic growth by emphasizing the quantitative changes in technical improvements, capital stock, natural resources and population. Though they differ among themselves their general approach is basically the same. We put together what is common among them as a format for a theory of economic growth.

7.3.1 Features of Neo-Classical Theory

The main features of the Neo-Classical Theory of Economic Growth as propounded by different neo-classical economists are as follows:

i) ***Process of capital accumulation:*** The chief contribution of neo-classical economists to the theory of economic growth is their analysis of the process of capital accumulation. The process of capital accumulation accompanied by a given size of population is advanced through improved technology which leads to an increase in investments. The demand as well as the relative prices of capital goods, rate of interest and rate of savings increase in the short period, but finally, in the long run the rate of interest and profits decline to such a low level that people do not have inducement to save or invest. Hence, the stage of capital accumulation comes to an end and the economy ultimately reaches a stationary state.

To explain the way actual process of capital accumulation takes place, one may start with a situation, some once-for-all event, say an advanced technology opens up new opportunities for capital goods. This in turn increases the need for more funds. And, this in turn raises the rate of interest, and brings forth more savings and therefore more loanable funds. At the same time, the prices of capital goods also increase relative to the prices of other goods. When the rate of interest is high and the prices of capital goods are high, investment gets restricted to only those projects which yield high returns (profits). When all these projects are completed, there is a sharp fall in the demand of funds for such projects. The result is that there is a fall in the rate of interest. At the same time, the prices of capital goods also fall. In such a situation, investments are made available for profits which yield low returns The investment opportunities further shrink and the rate of interest further falls till it reaches a level where community is unwilling to save. At this stage, the capital accumulation' stops and the economy ultimately reaches a stationary state.

ii) ***Saving and investment:*** According to neo-classical economists, increase in capital stock takes place with the increase in savings which in turn is dependent upon the rate of interest and the level of income. Interest, according to the neo-classical theory, is the reward for waiting. It is because such waiting involves postponement of current consumption to some future date. So far as the level of income is concerned, if an individual saves more out of given income, his preference for present income becomes more. It means that higher

rate of interest is essential to secure a large saving from a given level of income. Thus, at a higher level of income an individual is prepared to save more at a given rate of interest. Thus, higher level of income leads to higher rate of saving at a given rate of interest. This amounts to saying that resources to produce capital goods are available only by sacrificing some quantity of consumer goods in the present period. In other words, capital accumulation necessitates refraining from some current consumption. In the neo-classical model, savings are conceived as the source of loanable funds which signify release of resources from the production of current consumption goods for use in the production of capital goods. Investment on the other hand is a source of demand for loanable funds. This investment is influenced by the marginal productivity of capital. In this context, the rate of interest also gets into the model as determining the cost of loanable funds. The investor, interested as he is in maximising his profits, continues to invest so long as the discounted marginal productivity of the assets added is greater than its cost. Interest, thus, is the essential factor both in respect of the supply of loanable funds (savings) and the demand for the funds (investment). Lower rate of interest leads to a higher rate of investment.

iii) ***Effects of population increase:*** According to the neo-classical economists, there is a very close relation between the growth of population and economic development. Increasing population, accompanied by a given technology, enhances the labour supply which results in lowering wages and leads to an increase in employment and production of goods in the economy. The producers get more profits and greater opportunities to increase their investments. The marginal productivity of capital also rises. To finance the increase in demand of goods, the producers need more funds. This raises the rate of interest. And as described earlier in the process of capital accumulation, the same process gets into motion. First, high yield projects are completed, afterwards low-yielding projects are taken up, and so on and so forth. In the meantime interest rate falls till saving stops, and so does capital accumulation. The economy moves into the stationary stage.

iv) ***Development is evolutionary and harmonious:*** The neo-classical economists conceded that the process of economic development was gradual, evolutionary and harmonious. Alfred Marshall (1890), who was greatly impressed by the Darwin's theory of evolution, emphasised the gradual growth of an economy. Marshall, as a leading member of the neo-classical school, stated: "The Mecca of the economists lies in economic biology, rather than in economic dynamics. He added that "nature does not willingly make a jump is specially applicable to economic development." In explaining the harmonious nature of the development process, Marshall has stressed the role of "external economies". Taking into account all benefits of external economies, he points out that the emergence of an industry in a particular region not only creates the conditions of its own growth but also leaves expansionary effect on other industries. The expansion of an industry not only lowers its own costs but also those of others. Similarly, the development in one sector of the economy leads to the growth and development in other sectors. Marshall accepts the complementary nature of the economy and concludes that the process of development appears to be in a cumulative manner.

v) ***Optimism about development:*** The neo-classical economists seem to be more optimistic about the continuing economic growth. They believe in the development of the man's abilities which may remove all the limitations imposed by nature on the development of a society. It can be done through technological progress and improvements in the efficiency of labour. Denying the Ricardian fear of the operation of the law of diminishing returns and of the stationary state, Marshall (1890) stated: "There seem to be no good reasons for believing that we are anywhere near a stationary state". The technological progress and improvements in the quality of labour will tend to develop a general tendency towards increasing returns. Besides this optimism, the neo-classical economists are not fully free from Malthusian fear. They are confident that the process of development in the society may be limited by the excessive growth of population in the long run, and hence they alert the humanity to be ready to "find the way for much slower progress and possibility for completely stationary conditions".

vi) ***Importance of international trade:*** The neo-classical theory of economic development gives much importance to international trade, because it can raise the national income of an economy and can, thus, put it on the way of rapid economic development. International trade promotes the techniques of specialisation and the division of labour which result in better and more efficient allocation of global resources and greater production. The increasing national income leads to greater savings, capital formation and more investment which stimulates the rapid economic growth. The neo-classical economists believe in free international trade, but they also want to give due importance to protectionism in the special conditions. The economists like Marshall and Edgeworth admitted that there was a need of protective tariff to establish and support the domestic industries in an economy. But, their ultimate goal is to establish the free trade in the world. Most of the neo-classical economists accept that "free trade, like honesty, still remains the best policy." They favoured universal policy of free trade.

vii) ***Technological progress:*** Technological progress has been assigned a very crucial role in the neo-classical theory of economic growth. It reduces cost of production. It also encourages producers to expand output. According to neo-classical economists, technological advances are relatively more capital-saving and more capital-using. Technological advancement creates demand for more capital goods.

viii) ***Natural resources:*** While per capita income tends to increase when capital accumulation takes place, its level depends on the availability of the amount of natural resources when the economy moves into the stationary stage. For example, in a situation of stationary state as described above when population continues to grow, the level of per capita income may be higher than its initial level with plentiful natural resources if the percentage increase in capital stock is as large as the percentage increase in labour force. This will be for the reason that with abundant resources, increasing returns to scale will prevail. However, if natural resources are not plentiful, the per capita income may decline or may remain constant. If, however, natural resources are severely limited, there is much greater possibility of per capita income to fall as population grows.

ix) ***Full employment:*** The neo-classical economists assure full employment during the entire period of capital accumulation. According to neo-classical theory, an increase in the supply of labour leads to a fall in the money wage and consequently raises employment. The employers find it profitable to employ more labour at the reduced rates, mainly because of two reasons: a) cost of production becomes lower and, b) the demand of products becomes higher. There will be full utilisation of capital stock. Joan Robinson (1937), a neo-classical economist, has named this stage of economic growth as the 'golden age' where there is full employment of labour and capital.

7.3.2 Neo-Classical Economists and Underdeveloped Countries

The neo-classical theory seems to favour underdeveloped countries as it incorporates such casual variables as are important for the development of these countries. For example, the neo-classical economists take account of such factors as population, supply of labour, capital and technological progress as explanations of growth. In respect of overpopulation or abundant supply of labour some individual economists of the school have focused on solutions too. For instance, Hamberg thinks of the solution in terms of increase in saving and in the full capacity rate of growth so as to absorb the surplus labour force. Another neo-classical economist, Joan Robinson (1937), in her model of economic growth also discussed the problem of population and its effects on the rate of capital accumulation and growth of output. She makes the formulation in terms of two fundamental factors. *Firstly,* capital formation is determined by the way income is distributed. *Secondly*, the rate of utilisation of labour is a function of the supply of the capital and labour. Any increase in population leads to an increase in labour force. If it is unaccompanied by increase in capital, then it would reduce labour productivity. And if real wages remain constant, it will reduce the margin of profit. This in turn widens the gap between capital and labour supply and also causes unemployment. Hence, to attain the 'golden age', where there would be full employment of labour and full utilisation of capital, it is essential that the growth rate of population is matched with the growth rate of capital.

According to Kaldor (1967), the underdeveloped countries are generally faced with the problem of population growth. Kaldor model explains that when the population growth rate is equal to or exceeds the growth rate of the economy, the technological progress function is adversely affected and the economy lands into a situation of premature stagnation. Kaldor suggests two alternatives to come out of this dilemma. *Firstly*, raising technological improvement in economic growth and *secondly*, control of population before it reaches maximum.

Another neo-classical economist, Meade (1951) stresses the role of population growth, capital increase and technological progress in determining the increase in per capita income in the context of underdeveloped countries. In addition, he formulates the conditions under which a stable growth of per capita income is possible when population is increasing. Given a constant proportionate rate of growth of population, the growth of per capita income will be constant and steady if the rate of growth of income is constant. And this will be so if the growth rate of capital stock is equal to the growth rate of income.

Robert M. Solow (1957), another neo-classical economist, considers the case of a dual economy, which is an important feature of an underdeveloped economy

The economy comprises two sectors — capital sector or industrial sector, and labour sector or agricultural sector. In capital sector, the rate of accumulation of capital is more than the rate of absorption of labour. More employment opportunities can be created in this sector with variable technical co-efficients. Agricultural sector is marked by the existence of disguised unemployment and the shortage of skilled labour. The real wages are very low and the productivity per worker is also low. Under such conditions the steady growth can be achieved and maintained only if the capital-labour ratio is substantially higher. This is an important lesson which the underdeveloped countries can learn from the study of Solow's model. Thus, this model is very much relevant to the conditions of underdeveloped countries as it critically evaluates neo-classical contribution to economic development.

7.3.3 Critical Appraisal

The neo-classical theory of economic growth assumes certain conditions which are quite helpful to economic growth of a country. These conditions are: adequate supply of trained labour and managerial skill, well-developed banking system, adequate and efficient system of transport, free transfer of knowledge between different countries, and the keen desire to develop at the earliest. Some of them are helpful for capital accumulation, exploitation of natural resources and technological progress. This is their valuable contribution towards understanding the process of economic-growth which is quite helpful for countries desirous of rapid economic growth. The neo-classical economic growth theory in the form represented by neo-classical economists like Solow, Meade, Joan Robinson and Kaldor is quite simple and attractive. They promise a state of steady economic growth. Again, the concept of 'golden age' lays stress on the parity between the growth rate of capital and growth rate of population. The parity between these two rates of growth is very essential for the under-developed countries striving for development with stability.

Despite the above merits, neo-classical theory of economic growth suffers from the following weaknesses and, thus, is subject to criticism from different corners.

i) The approach of neo-classical economists to the theory of economic growth is rather narrow and inadequate, as they have ignored the importance of non-economic factors such as political stability, viable social structure, people's attitude, and better and efficient administration.

ii) The models presented by neo-classical economists are based on certain assumptions which do not hold good in the real world. They hardly meet the requirements of modern economic growth. For example, the assumption of neo-classical economists that the process of economic growth was gradual, continuous and harmonious was wrong, since they could not analyse the possibilities of cyclical fluctuations in the process of economic growth. Moreover, their assumption of full employment was also very unrealistic.

iii) Neo-classical economists did not realise the significance of the role of the State in making a favourable environment for economic growth,

iv) The neo-classical economists ignore the role of *investment functions*. For example, Meade (1951) starts the discussion of his model with the production function and not with the investment function. In the real economic world,

these two functions are closely related to each other, as the production depends on investment and vice versa. Due to the omission of investment function, the model fails to consider the role of expectations of the investors about the future course of development.

v) Neo-classical models fail to consider the role of social and institutional factors. The economic growth of industrial economies was very much helped by the existence of certain strategic social groups consisting of people who were willing to finance risky ventures, make risky business decisions, etc. Among the institutions which helped the growth of advanced economies were joint stock companies, trade unions, etc. These social and institutional factors have not been incorporated in these models.

vi) The neo-classical economists view that the development is continuous, gradual and harmonious is not based on realistic ground. All this can be valid only if there exists a very high degree of certainty so that careful calculations become feasible. It is only then the price-mechanism as also interest rate can be effective as per the vision of the neo-classical economists. It is then that all sections of the population can benefit. In reality, however, it is not so. Development itself is a discontinuous process, causing uncertainty about the future. As a result, prices alone cannot motivate producers to allocate resources optimally. Further, interest rate alone cannot be the deciding factor in investments, nor can the change be harmonious. In fact, it is disruptive of the social relations and in many respects harmful for certain sections of the population.

vii) Neo-classical economists advocated free trade policy for economic growth. According to this policy, there is no government interference in the field of trade and the economy operates automatically through perfect competition. In reality, there is no economy in the world which is free from government interference and in which perfect competition prevails.

From the above critique we can conclude that the neo-classical models of economic growth are based on certain very restrictive assumptions which do not hold good in the real world. Difficulties of applying these models in the case of underdeveloped countries are still greater because assumptions regarding full employment of labour and capital, perfect competition, constant returns to scale, closed economy, laissez-faire policy, etc, do not at all fit in their economic realities.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

2) Critically evaluate the neo-classical theory of economic development.

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7.4 KEYNES' THEORY OF ECONOMIC DEVELOPMENT

Keynes (1936) made his greatest theoretical contribution to the field of short-term economic analysis, but his short-term was never too short to let him take wings in the long run. In this section we attempt to analyse briefly the Keynes theory of employment and its important variables on which the level of national income and the total employment in the economy depends.

7.4.1 The Consumption Function

The greatest contribution of Keyne's General Theory has been the formulation of *Consumption Function.* It simply represents the ratio of consumption to aggregate income. The level of income is determined by the degree of investment without considering the time-lags into account. The effective demand is determined by consumption which governs the production of both consumer goods and capital goods. The fall of effective demand, i.e. the lagging of consumption as a matter of fact causes a crisis and leads to depression. Keynes says that there is a close relation between the total income and the total expenditure of a country. Psychologically, when income increases, the expenditure on consumption goods does not increase in proportion. With this assumption, Keynes analyses the factors governing the total income and total employment with the following equations:

$$Y = C + I$$

Here 'Y' represents the total income, 'C' the total consumption and 'I' the total investment.

It can be illustrated in other form in the following manner:

$$Y = C + S \qquad \text{Where, S represents surplus.}$$

Hence, $Y = C + I$ or $Y - C = I$

$Y = C + S$ or $Y - C = S$

or $S = I$

7.4.2 The Inducement to Invest

The tendency of inducement to invest depends upon two factors: i) the rate of interest, and ii) the marginal efficiency of capital. The marginal efficiency of capital refers to the "ratio of the expected yield of an additional capital asset over a period of time to the supply price of the asset." It may be defined as the "highest rate of return over cost expected from the marginal or additional unit of a capital asset." The inducement to invest depends mainly upon the marginal efficiency of capital. According to Keynes, a rising trend in the marginal efficiency of capital and growing consumers' demand were, therefore, essential to maintain through the technological improvements and discovery of new resources, so as to continue the flow of investment.

7.4.3 The Rate of Interest

Besides the marginal efficiency of capital, the inducement to invest is also influenced by the current rate of interest. To him (Keynes), "the rate of interest is

the price paid for parting with cash or liquidity and using it for investment in assets." Interest is, thus, determined by the liquidity preference which is found in an individual or a group of individuals for fulfilling: i) the transactional motive -- the daily needs of life; ii) the future or unexpected needs; and iii) the speculative motive -- business needs. The greater the liquidity preference, higher will be the rate of interest and vice versa. In the same way, if the money supply comes down in the economy, the rate of interest will be increased; if it goes up, the rate of interest will be reduced, Moreover, if the rate of interest rises, people will consume less and save more in order to take advantage of the higher rate. On the contrary, if the rate of interest falls, people will consume more and save less.

7.4.4 The Concept of Multiplier

The application of multiplier which is just like a wave in the river, giving rise to a number of waves, multiplies the money injected into the economy. Consequently, the amount invested in the economy results in the increase many times over in production and national income. It, thus, increases more than the basic investment. Out of this increased income, *one part* will be expended by the workers, producers and moneylenders, which will lead to increase in the income of the other sections of the society. The *second part* of this may be invested by the beneficiaries and this process will go on repeatedly. If this money is expended immediately, the secondary income will rise so rapidly at every round that it will lead to the income and employment to the largest extent. But, if the process continues frequently, there may be inflationary conditions in the economy. If the consumption does not increase in proportion to the increased income, the multiplier will be zero. The nature of the multiplier is, thus, determined by the relative amount of saving and consumption to be spent out of the increased national income. With the above illustration of the Keynesian Theory of Employment, it can be concluded that the volume of total employment is related to the size of the national income. The greater the national income, the higher will be the level of employment and vice versa. The national income, on the other hand, depends on the effective demand. It is, thus, effective demand which determines the volume of employment in a country. It depends on the propensity to consume and the inducement to invest. The marginal propensity to consume remaining constant, the employment will vary in proportion to the volume of investment. If the marginal propensity to consume falls rapidly, it is not necessary that an increase in investment will be accompanied by an increase in the volume of employment. It is, thus, worth noting that if we want to increase the level of employment in the society, effective demand will have to be promoted by increasing investment. The statement that the starting point of Keynes' Theory of Employment is the *principle of effective demand*, looks to be quite significant and remarkable.

7.4.5 Tools of Keynesian Economics and Underdeveloped Countries

It is now clear that the assumptions taken into consideration in the Keynesian theory of growth are not applicable in the developing economies. It will be better here to discuss the basic tools of the Keynesian theory, so as to measure their relevance to underdeveloped economies.

i) ***The effective demand:*** According to Keynes, the unemployment or underemployment in a capitalist economy is a short-tern problem and is caused from a deficiency of effective demand at particular period of time; as

soon as this deficiency is removed by monetary or fiscal measures or through public works, the problem is solved. On the other hand, in an underdeveloped economy, there is disguised or chronic unemployment and no involuntary unemployment. In such economies, unemployment it is not caused by lack of effective demand, but by the resource deficiencies. Hence, their problem is not of raising the effective demand, but of raising the level of per capita income and employment which, in turn, will stimulate economic development in the underdeveloped economies (Rao, 1963).

ii) ***Marginal efficiency of capital (MEC):*** In his theory, Keynes believes that it is the marginal efficiency of capital which plays a very important role in determining the level of investment. Both investment and marginal efficiency of capital have negative relationship. However, it is not applicable to underdeveloped countries, as there is low level of investment and MEC in these economies. This paradox happens to be due to the deficiency of capital and high-cost other resources followed by low demand and underdeveloped markets. It results in meager profit expectations i.e. the MEC remains at a low level due to all these factors.

iii) ***Propensity to save:*** J. M. Keynes conceded that the excess of savings was a social vice because it led to fall in aggregate demand, and hence, he advised to raise consumption and reduce savings for economic growth. But, in the underdeveloped economies savings lead to an increase in the capital formation which is a master key for their economic development; the remedy of all their economic problems and a panacea for their economic development.

iv) ***Propensity to consume:*** Keynes has laid emphasis on another important tool of his economic analysis which is propensity to consume. The Keynesian economics makes it clear that when there is a rise in the income, high marginal propensity to consume is essential in the process of economic development, as it leads to an increase in the effective demand followed by high level of production and employment. But, in an underdeveloped economy these relations among income, consumption and savings do not hold good in the same way. When income increases, in such economies the production of consumer goods does not rise due to the lack of capital and other resources. Consequently, prices of commodities accelerate, and not the level of employment.

v) ***Rate of interest:*** The Keynesian economics assumes the rate of interest as a secondary determinant of investment. It is, in turn, decided by the supply of money and the liquidity preference. Out of three objectives of liquidity preference, the transaction and precautionary objectives do not influence the rate of interest, because they are income elastic. It is only the speculative objective that affects the rate of interest. Due to uncertainties in the socioeconomic life in underdeveloped economies the liquidity preference for transactional and precautionary objectives stands high while for speculative objectives it is low. As a result, the liquidity preference fails to influence the rate of interest in such economies. On the other hand, the rate of interest is determined by the supply of money. According to Keynes, a rise in the supply of money lowers the rate of interest and raises the level of investment, income and employment. But, in an underdeveloped economy, a rise in money supply leads to an increase in the price level rather than decline in the rate of interest.

If we apply the Multiplier theory in underdeveloped countries, the value of the multiplier would be much higher than even in a developed country. Since the multiplier depends upon the size of marginal propensity to consume which is high in underdeveloped countries, small increments of investment are likely to induce full employment much earlier than in a rich country where marginal propensity to consume is quite low. Thus, the assumptions on which the multiple theory is based are not valid in underdeveloped countries. Rao (1963), an eminent Indian economist, analyzing the feasibility of applying the Keynesian multiplier theory and policy implications to an underdeveloped country like India commented that Keynes never formulated such a theory which could have solved the economic problems of an underdeveloped economy nor he discussed the relevance of the theory to such an economy.

vi) ***Involuntary unemployment:*** Another assumption underlying Keynesian analysis is of involuntary unemployment which means that people are willing to work at the current rate of wages but they do not get work. The implication of this assumption is that the labour supply in the Keynesian framework is elastic. This, however, is not the case with the labour supply in underdeveloped countries. Despite the fact that the labour supply in underdeveloped countries is in abundance due to overpopulation, its supply is not elastic. In other words, the labour is not readily available. The reasons are not far to seek. These workers are not in involuntary employment because they have not been put out of work (Hirschman, 1958). They have, in fact, been working all along as permanent workers in household activities, including farming as part of family labour. Most of these in underdeveloped countries are in disguised unemployment in the sense that their withdrawal from the present work will not cause reduction in output. Since those in disguised unemployment are sharing the work and consumption, they are not in a sense even unemployed, much less in involuntary unemployment. In short, the laborers in disguised unemployment in the underdeveloped countries are those who cannot be easily coaxed to go in jobs outside their familiar ones. Thus, the labour supply from the Keynesian angle is not elastic[5].

vii) ***Policy measures:*** Like other tools of the Keynesian economics, Keynes' policy prescriptions are hardly applicable under the conditions of a poor economy (Rao, op. cit.). Rao further maintains that the investments through the deficit-financing lead to an increase in the prices, but do not raise the level of output and employment. Rao states that "the economic policy of deficit- financing and disregard for thrift advocated by Keynes for securing full employment do not apply in the case of an underdeveloped country." But, at another place, he concedes the importance of the deficit-financing, but under limitations. In his own words, "the only question is the extent to which it is wise to resort to deficit-financing; and the obvious answer is that the deficit-financing should not be resorted to beyond the point at which it becomes inflationary."

7.4.6 Critical Appraisal

Keynes analytical framework mainly confines to the short-period analysis and it has nothing to do with the problems of long-period growth. This view is based on Keynes dictum that "in the long run we are all dead" (Keynes, 1936). Keynes, no doubt, had made his greatest theoretical contribution to the field of *short-*

term economic analysis, but his short-term was never too short to let him take wings in the long run. It is also argued that Keynes theory has no relevance to underdeveloped countries. His main concern was to find out the conditions necessary for steady growth in a developed capitalist country. Thus, Keynes' theory has more relevance to developed countries. But this view too is not wholly correct. In fact, Keynes theory is neither purely a short-term analysis and nor it is confined to the developed countries of the world. Keynes' ideas and theories have greater relevance to, as opined by others, to under-developed countries of the world. According to Kurihara (1954): "Keynes insights and theories will be found to have greater relevance to underdeveloped countries than is commonly supposed, particularly to those which are inclined to develop along democratic rather than authoritarian lines". Keynes was undoubtedly a brilliant economist of twentieth century. His greatness lies not merely in demolishing the classical theory of full employment, which failed to come to the grips with the problems of the depression of 1930s, but all developing an alternative theory, 'The General Theory of Employment, Interest and Money', published in 1936 popularly known as the 'General Theory of Employment'. It correctly analysed the ailing western economies in that critical period. He completely rejected the classical theory. His remedial policy proposals made, in the theoretical framework of the 'General Theory' were found effective and a great number of economists had started believing that they had got the proper answer to the problems of market economies. Sukhamoy Chakravarty (1990) referring to Keynes' impact on economic thinking has stated: "The Keynesian contribution to the development of economic thinking has been so profound and pervasive that it has become impossible to state with any degree of categoricalness what are the specifically Keynesian components in the intellectual make of a standard economist of today. This is because, with some exceptions today everybody is a Keynesian in some sense or the other".

Keynes' theory is a general theory and as such has a very wide application in all situations --unemployment, partial employment and near full employment. On the contrary, the classical theory only relates to full employment which hardly prevails in any country whether developed or undeveloped. Thus, it had given a fatal blow to the old classical theory. Further, Keynes proved with the help of his theory that a balanced budget was not always the best policy to adopt on the part of a government. The budgetary policy of the government should be decided in the light of the economic situation prevailing in the country. According to the classical economists, increase in money supply brings about inflation and must, therefore, be avoided. On the contrary, according to Keynes, increase in money supply would increase employment and output and may not necessarily result in inflation. In this way, Keynes' theory has greater relevance to the world of reality and has great practical value too; whereas, the views of the classical economists are more or less theoretical and devoid of any practical importance. In fact, Keynes' theory is entirely new and marks a revolution in economic thinking. It has been aptly called a 'Keynesian Revolution'.

Despite the above achievements, the *failures and weaknesses* of Keynes' theory cannot be overlooked or condoned. The criticism may be summarised as under:

a) According to critic, John, R. Harris, "Keynesian theory is capitalist theory. If communism comes, Keynes will be as dead as Ricardo." Though Keynes suggests government intervention-controlled capitalism, his theory fails to deal with socialist economic system.

b) Keynes' theory is static in nature, and does not consider lags in the behavior of economic variables. Instead, Post-Keynesian economic analysis is truly dynamic in nature as it gives due regard to time element.

c) Keynes' theory assumes perfect competition which is a highly unrealistic assumption.

d) Keynes' theory deals with short-period analysis and short–run policy measures. Thus, it ignores the long-period analysis.

e) According to critics (Thomas J. Sargent, 1977), Keynes' theory being a purely macro- economics analysis completely ignores micro-economic analysis.

f) Keynes' theory has not given any place to accelerator principle. However, we know that an integration between the multiplier and the accelerator is essential to explain adequately the economic problems.

g) Keynes' theory is not applicable any where and every where. Its application is limited at best to industrially developed and relatively rich countries like the U.K., Germany, and the U.S.A., where the system of free enterprise still holds sway.

h) According to some other critics, Keynes' theory is largely a *monetary theory* since it pays excessive attention to money in economic analysis.

On the basis of the above discussion, it can be concluded that though Keynes did not evolve any theory of development, yet his ideas have been enriched in other theories. His ideas left indelible impressions on the development theories. Keynes provided the tools which have been abundantly used by the post-Keynesian economists so as raise the superstructure of modern growth theories.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

3) Explain the concepts of 'Multiplier' and 'Propensity to Consume'

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7.5 KARL MARX'S THEORY OF ECONOMIC DEVELOPMENT

Karl Marx (1818-1883) is one of the few thinkers in the history who had a direct and persuasive influence on millions of people by his doctrines. His followers hold him in high esteem. He is respected as a real prophet like Christ and Mohammad. Schumpeter (1911) wrote while paying tributes to the personality of Marx, "Marxism is a religion. To an orthodox Marxist, an opponent is not merely in error, but in sin". Robert Heilbroner (1968) stated that, Marx is an "angry genius". He prophesized the inevitable decline of capitalism and advent of socialism. His main ideas about development include:

i) The materialistic interpretation of history,

ii) The theory of class struggle,

iii) The theory of surplus value and capital accumulation,

iv) The concept of reserve army, and

v) Economic development under capitalism.

7.5.1 The Materialistic Interpretation of History

The term materialistic interpretation of history has been used by Marx (1887) to explain that all historical events have been influenced by the economic conditions. This concept conveys that the foundations and evolutionary causes of social life are closely connected with economic circumstances. Marx believes that economic forces determine the social, cultural, legal and institutional structure of the society. Thus, the materialistic interpretation of history attempts to show that all historical events are the result of a continuous economic struggle between different classes and groups in society. The main cause of this struggle is the conflict between the mode of production' and 'the relations of production' (Higgins, 1966). The mode of production refers to a particular arrangement of production in a society that determines the entire social, political and religious way of living. The relations of production with the class structure of a society are uniquely characterised by the following components.

i) The organisation of labour in a scheme of division and cooperation, the skills of labour, and the status of labour in the context with respect to degree of freedom;

ii) The geographical environment and the knowledge of the use of resources and materials; and

iii) Technical means and processes and state of science generally.

The theory of historical materialism of Marx starts with the simple truth that man must eat to live. The survival of man depends upon the capacity with which he can produce the commodities he needs. Production is important of all human activities. Society is the result of human activities to secure necessities of life. But, man does not produce what all he needs and starts the struggle for his survival. This struggle involves many stresses and strains. Hence, in securing necessities of life in the past, the society has crossed four stages viz. a) primitive or Asiatic stage; b) ancient or slavery stage; c) Feudal stage and d) Capitalist stage. Under the first stage, the factors of production are owned and controlled by their

community or society and individuals get their requirements according to their needs. But, in the latter three stages, the class that controls the factors of production also controls that society. In these three stages, there are always two groups/ classes, i.e. dominant and depressed or rich and poor or propertied and non-propertied or haves and have-nots. It is the domination of one group or class of people over the other that creates a state of tension and conflict. Since the mode of production is subject to change, a stage comes in the evolution of a society when the forces of production come into clash with the society's class structure. The ultimate result is the "social revolution". This leads to the class struggle i.e. the struggle between 'haves and have-nots' which immediately overthrows the whole social system. In short, it is the economic environment which influences and shapes the structure of a society.

7.5.2 The Theory of Class Struggle

For Marx (op. cit.), history of the existing society is the history of class struggle. He has used his theory of surplus value as the economic basis of the 'class struggle' under capitalism. On the basis of his theory of surplus value he has built the super structure of his analysis of economic development. Class struggle is simply the outcome of accumulation of surplus value in the hands of a few capitalists. As at every stage of history society is divided into two classes -- "Free man and slave, Patrician and Plebian, Lord and Serf, guild master and journeyman; an oppressor and oppressed". Capitalism also divides the society into two classes – the rich and the poor, or the capitalists and the working class, or the haves and the have-nots, or the exploiters and the exploited. The working class sells their 'labour-power' and the capitalists owns the means of production. The capitalist class exploits the labour (working) class. For some time, the relationship between them remains positive, but very soon the means of production undergoes a revolutionary change. New techniques, new methods of production, new machines are introduced. Such changes hard press the exploited class resulting in discontentment and intensifies the class struggle. The outcome of class struggle is the revolution, which gives birth to new social order called socialism. He, thus, looks upon class struggle as the mechanism of social change -- a change for the betterment of the working class. Under the new social order, economic conditions are improved and a satisfied labour class emerges, which works for the progress and development of the society. Hence, the class war in the Marxian system is considered as a mechanism of social change and economic progress.

7.5.3 The Theory of Surplus Value and Capital Accumulation

The theory of surplus value is another important component of Marx's economic theory. It has been used as the framework by Marx to build his theory of capitalistic development. He believes that labour power is like any other commodity. The labourer sells his labour for what it is worth in the labour market, i.e. for its value. And its value, like value of any other commodity, is the amount of labour that it takes to produce labour power. In other words, the value of labour-power is the value of means of subsistence necessary for the maintenance of the labourer, which is determined by the number of hours necessary for its production. To him, the value of the commodities necessary for the subsistence of the labour is never equal to the value of the produce of that labour. If labourer is for a ten-hour day, but it takes him six hours labour to produce goods to cover his subsistence, he will be paid wages equal to six hours labour. The difference worth by four hours labour goes into the capitalists pocket in the form of net profits, rent and

interest. Marx calls this unpaid work as "Surplus value" and the extra labour that a labourer puts in and for which he receives nothing as "surplus labour". This surplus value is appropriated by the capitalist class which ought to have gone to the workers. This is pure and simple exploitation of working class, says Marx. Larger the surplus value, greater is the exploitation. To Marx, capitalists are not interested in producing those goods, which are useful and needed by the society, but in extracting as much surplus value as possible. Hence, exploitation of labour creates surplus value or profit and it is the reinvestment of surplus value which ultimately ensures the progress of a society under capitalism.

To Marx, it is surplus labour that leads to capital accumulation. This *supererogatory* labour simply augments the capitalists' profits. Profits are determined by the amount of capital. As Marx says, "capital is dead labour that vampire like only lives by sucking living labour and lives the more, the more labour it sucks". To explain the origin of profit and to analyse the relation between wages and profits, he separated capital into constant capital and variable capital. Capital invested in stocks or raw materials or equipment which directly assists the productivity of labour, he treated as *constant capital* (C). Capital devoted to the purchase of labour power in the form of wages or direct subsistence, he termed as, *variable capital* (V). The surplus value is denoted by (S). Then, the total value of the product (W) = constant capital (C) + variable capital (V) + surplus value (S) or W = (C + V + S).

On the basis of this division of the total output, Marx has introduced his Departmental Scheme of Simple and Expanded Reproduction to explain how and where the capital accumulation will take place. He divided the total output of the economy into Department-1 and Department-2. The former is related to the production of capital goods and latter to the consumer goods. The total output of each department is,

$$W_1 = C_1 + V_1 + S_1$$
$$W_2 = C_2 + V_2 + S_2$$
$$W = C + V + S$$

The simple reproduction scheme indicates a situation of stationary state in which all produced is consumed. Thus net investment is zero and there is no accumulation or surplus. Therefore, equality prevails in both the departments. Hence, the value of constant capital in both the departments ($C_1 + C_2$) must equal to the output of Department 1 ($C_1 + V_1 + S_1$).

$$C_1 + C_2 = C_1 + V_1 + S_1$$

Or $C_2 = V_1 + S_1$ (By eliminating the common factor C_1)

Similarly, the total consumption in both the Departments ($V_1 + S_1 + V_2 + S_2$) must be equal to the total output of Department 2 ($C_2 + V_2 + S_2$).

$$C_2 + V_2 + S_2 = V_1 + S_1 + V_2 + S_2$$

Or $C_2 = V_1 + S_1$ (By eliminating the common factor $V_1 + S_2$)

This indicates that the value of constant capital in Department-2 must equal the value of commodities consumed by workers (V_1) and capitalists (S_1) in

Department-1. But, in Marx's Expanded Reproduction Scheme that accumulation takes place because the production of Department-1 (Capitalist sector) is greater than the demand for constant capital in both the departments.

$$C_1 + V_1 + S_1 > C_1 + C_2$$

Or $V_1 + S_1 > C_2$

This shows that accumulation is taking place which is being invested in employing more labour (V_1) and the means of production (C_1) in Department-1 than in Department-2. These, in turn, increase the surplus value (S_1).

To analyse the nature of capitalist accumulation, Marx established certain relationships between C, V and S. The ratio of constant to variable capital (C/V) is termed as the *organic composition of capital.* The rate of surplus value is defined as S/V, the ratio of surplus value to variable capital or of profits to wages. This is known as the *degree or rate of exploitation*. This leads Marx to point out that the rate of profit is not dependent solely on the rate of surplus value. The rate of profit (r) can change even though the rate of surplus value (S/V) remains constant, if a change occurs in the organic composition of capital (C/V). The influence of technical progress is to alter the organic composition of capital, generally in the direction of rising the ratio of constant to variable capital. Hence, the tendency of industrial progress is to lower the rate of profit 'r' even though there is no decrease in the rate of surplus value.

According to Marx, the capitalists increase the surplus value or profits by exploitation of labour class in the following three ways:

i) By increasing working hours;

ii) By lowering wages below the subsistence level; and

iii) By improving efficiency and productivity of the working class which requires an improvement in the state of technology.

Out of these three options, Marx favours the last one. He argues that the best way to increase the surplus value is to improve the productivity of labour class. The other two options i.e. lengthening of working days and reducing the wages below the subsistence level have their own limitations. Only way to raise economic surplus is to introduce new techniques of production. The capitalists who take lead in introducing new machinery or new production instruments would gain advantage over their competitors. They would be in a position to secure larger economic surplus and, hence, initiate capitalist development. His analysis, thus, has highlighted the role of economic surplus in the development process of a society. Capital accumulation, thus, serves as a cradle for development.

7.5.4 The Concept of Industrial Reserve Army

One of the consequences of capital accumulation is the concentration of capital in gigantic enterprises. Competition among capitalists forces them to cheapen their products. This can be done by introducing labour-saving machines which increase labour-productivity. Those capitalists who are unable to replace labour by machines are 'Squeezed out' and their enterprises are taken over by big capitalists. Hence, capital accumulation and concentration involve increase in

constant capital and decline in variable capital. The rapid growth of constant capital as compared to variable capital leads to a relative decrease in the demand for labour. This process of supplementing labour by machines creates an industrial reserve army which increases as capitalism develops. The larger the industrial reserve army, the worse are the conditions of the employed workers, since the worse are the conditions of the employed workers the capitalist can dismiss dissatisfied and troublesome workers. The capitalists are also able to cut down wages to a semi-starvation level and appropriate more and more surplus value. This is the law of the increasing misery of the masses under capitalism. As the industrial reserve army expands, capitalists start adopting labour-saving machines and reduce the wage rate to minimum subsistence level in order to have more surplus value.

7.5.5 Economic Development under Capitalism

Marx believes that the capitalist development is a discontinuous process and the cyclical fluctuations are the integral parts of economic development. At the same time, he did not evolve any scientific theory of economic crises. But, his writings reveal that there are three causes of economic crisis.

i) Falling rate of profit,

ii) Disproportionality among various lines of production, and

iii) Under-consumption.

i) ***Falling rate of profit:*** When the capitalist is replacing the workers by machines, he is killing the goose that laid the golden eggs, because there will be continual reduction of the surplus value. He believes that technological progress tends to increase the organic composition of capital (C/V). Since the rate of profit is inversely related to the organic composition of capital, the former tends to decline with accumulation. He explains that the rate of profit (r) varies inversely with the organic composition of capital (C/V) and directly with the rate of surplus value i.e. the rate of exploitation (S/V). Therefore, the rate of profit 'r' rises with the rate of surplus value (S/V) and falls with the rise of organic composition of capital (C/V).

   Another reason for the decline in the rate of profit is the rise in wages of labour class. In short period, the capitalist can exploit workers by paying them subsistence wage, there by increasing the surplus value. The increase in the surplus value leads to the increase in the capital accumulation. As capital accumulation increases the demand for labour rises. Up to full employment level, the labour is hired at subsistence wage by the capitalists. After that point increase in the capital accumulation pushes up the wage rate and thereby decreases the profits rate. The decline in profits rate slackens the rate of capital accumulation, which brings about the economic crisis.

ii) ***Disproportionality among various lines of production:*** The second reason for the decline in the rate of profit is the unbalanced growth of different sectors. In a capitalist society, the production is carried on in an independent manner and very often capitalists commit blunders and errors in estimating the future trend of the markets because of imperfect knowledge about the market which leads to over production. Over production creates glut of commodities in the market and producers are unable to sell their output at

remunerative prices which ultimately depresses the level of profit. The problem of over-production in one sector adversely affects the other sectors also and this will lead to economic crisis.

iii) ***Under-consumption:*** It is another factor that leads to economic crisis in a capitalist society. Perhaps, his most celebrated crisis theory is his "under-consumption theory". He does not believe in Say's (1855) law of market that "Supply creates its own demand". His phenomenon of under consumption explains that the consumption propensity of working class is limited by its purchasing power which is determined by the extent of poverty and their exploitation by the capitalist class. On the other hand, the consumption propensity of capitalist class is limited by their greed for capital accumulation. They will try to accumulate more and more capital to become industrial monarch. Hence, the aggregate consumption expenditure will be stable or deficient which causes over production. Over production again leads economic crisis.

When the capitalists find themselves caught in the web of economic crisis and when they find that their profits are falling due to over production, they will try to discover and explore new markets. This leads to opening-up of foreign trade, which in the past had led to the establishment of colonial empires. He states that colonialism increases exploitation of resources and markets of the poorer countries for the benefits of capitalist nations. In this way export of goods and capital to backward countries lessens the tendency of stagnation in the capitalist society and relieves it of the domestic pressure of over-production. But, one cannot conclude that this will prevent the doom of capitalism. From Marx's point of view it merely post-pones the doom. It is true because if we analyse the history of the world, the two world wars of 20th century were the direct outcome of this tendency of capitalism. For instance, it is a historical evidence that Russia emerged as communist country because of first world war. China and many other countries of Eastern Europe became red as a reaction to capitalism. This historical evidence bears out the Marx vision of destruction of capitalism and emergence of socialism.

7.5.6 Marx's Model and Underdeveloped Countries

It would not be surprising to observe that in underdeveloped world, public opinion on economic matters is pervaded by Marxian ideology. This has come about through the operation and interaction of various factors and forces such as the following.

- External forces are responsible for the poverty of underdeveloped nations;
- Political and military success of communist parties and governments;
- Pursuit of comprehensive economic planning or its success in the Soviet Union;
- Socialist influence in the international flow of ideas and information; and
- Impact of rapid change brought about by the contacts with advanced economies.

In the light of these factors and forces, relevance of Marxian ideology to underdeveloped countries can be highlighted as follows.

Firstly, all these factors carry the special appeal for underdeveloped countries whose development strategy bears the imprint of Marxian ideology.

Secondly, for the purpose of discussion, an underdeveloped economy may be divided into two sectors -- Sector A (Capitalist sector or surplus-yielding sector) and Sector B (Subsistence sector). For rapid economic development, it is essential to develop and expand sector A, both technologically and structurally, so that it may yield a high rate of economic surplus. The reemployment of surplus in this sector will further induce the capitalists to accumulate more for further investment. In this way the development process will gather momentum and Sector B will also fall to the impact of developmental momentum and the economy as a whole will achieve progress and prosperity. This is essentially the Marxian gift to the under-developed countries, which aspire to embark on the path of economic development. Hence, his ideas about development process may be applicable to underdeveloped economies.

Thirdly, for rapid economic development, Marx has advocated the strategy of unbalanced growth i.e. the disproportionality in the growth of different sections. This strategy of development has been adopted in most of the less developed countries including India. To achieve balanced growth, sector B (Subsistence sector) could be modernised to make it a surplus-yielding. Progressive land reforms can provide necessary incentives to the farmers for increasing production and transforming the subsistence sector into the commercial one.

Lastly, the national development plans of underdeveloped countries (including India) reveals, that plans are largely formulated under the impact of Marxian theory of development. Growth of different sectors, priority allocation decisions by governments, balance in the public and private sectors, etc, are some of the strategies which have been stressed in the national plans. These plans have largely been influenced by the success of the plans in socialist countries like Russia.

It can, thus, be concluded that Marx's theory of economic development provides the guidelines and inspiration for development to underdeveloped economies.

7.5.7 Critical Appraisal

Marx's analysis of development has been variously assessed. For communists, his ideas were gospels; to the capitalists, his ideas are revolutionary. His philosophy has changed the face of the world. Even though his writings are read by millions in every nook and corner of the world, yet there are contradictions and inconsistencies in his ideas which are as follows.

a) ***Concept of historical materialism is open to objection:*** The concept of historical materialism or economic interpretation of history conveys that human activities are largely influenced by the economic factors. A critical examination of his concept would reveal that human activities are not influenced by economic factors alone. Non-economic factors also play their part. This concept ignores the role of non-economic factors, and undermines their importance. Human passions, sentiments, emotions, religion, etc influence and shape the structure of social and human activities. Hence, it would be unjustified to ignore the role of non-economic factors in human activities and social order.

b) ***The theory of class war is criticized:*** It is pointed out that the class war is not only bad, but it is harmful too. His theory teaches hatred, ill-will, suspicion and creates feelings of antagonism among the members of the society. It creates an atmosphere of tension and rivalry among different sections of society and development activities receive a great setback. The theory of class, therefore, is antithesis to development. Again, Marx has taken only two groups of people, capitalists and workers. He did not consider the emergence of one group such as new class of managers, technocrats, technical advisers, etc. who build-up co-operation between employers and employees and minimise the possibility of class war.

c) ***The theory of surplus value is defective:*** The doctrine of surplus value is considered as the weakest point in the philosophy. Karl Marx' critics state that it is not the sacrifice of wage earners alone which creates valuation of the commodity. Labourers alone cannot claim to have created value in the commodity, as it is the result of all the factors of production that produce commodity. Therefore, it is not correct to say that labourers are exploited, if their wages are not equal to the value of the commodity.

d) ***Effects of technological progress exaggerated:*** He has pointed out that increasing technological progress leads to unemployment and thereby raises the strength of industrial reserve army. This appears be an exaggerated view. In some occupations, unemployment may be possible due technological progress. But, the overall net effect of it has been to increase the employment opportunities in the long period. The investment associated with technological progress raises aggregate demand, income, output and employment.

e) ***Analysis of crisis is out-dated:*** Marx considers the business cycle as an integral part of capitalist development. But, analysis of business cycle lacks precision. His analysis of crisis is based on the nature of capitalist. A theory of crisis which ignores monetary and fiscal factors is an inconsistent, incomplete and inadequate. Another reason for crisis, according to him, is the tendency of under-consumption.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

4) Explain briefly Marx's contribution to economic development.

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7.6 DEPENDENCY THEORY OF DEVELOPMENT

In this section, we will focus on different aspects of dependency theory which is quite different from those discussed above.

7.6.1 Concept of Dependency Theory

The theory of dependency is found in the writings of a few Latin American Economists. The translation version, appeared in English in the mid of 1960s and early 1970s. The proponents of dependency theory are Andre Gunder Frank (1967), Oswaldo Sunkel (1969), Celso Furtardo (1964), Immanuel (1972) and Amin Samir (1976). The explanation of dependency given by the various writers differs in degree. However, each of them tried to focus on certain basic factors which are responsible for the underdevelopment of less-developed countries. In short, there are plurality of dependency views with different meanings of the concept and different analyses to explain underdevelopment. The dependence is the root cause of their backwardness.

According to the dependency theorists (economists), the whole world is divided between two sets of countries. DCs (developed countries) and LDCs (less developed countries). The farmer are in the centre of development (Western Europe, Britain and the United States) and the latter are in the periphery (backward countries of Asia, Africa and Latin America). Frank (op. cit.) calls the DCs as metropolis and LDCs as satellite countries. Others call the former as dominant and the latter as dependent countries. There are unequal centre-periphery relationships, whereby LDCs are dependent on DCs in trade, investment, technology, etc. This dependence leads to underdevelopment of the periphery; the centre is dominated by the powerful capitalist countries. The rich countries exploit the poor countries for their benefits. According to Dos Santos (1970), dependency is "a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which the former is subjected." Therefore, dependent relationship between two or more economies is one "when some countries (the dominant ones) can expand and be self-sustaining, while other countries (the dependent ones) can do this only as reflection of that expansion, which can have either a positive or a negative effect on their immediate development."

Nevertheless, we should know that there is no unanimity among economists about the meaning of dependency because of differences among them about the relative role of various features of dependence which have caused underdevelopment of LDCs. Sanjay Lall (1975) observed: One sometimes gets the impression, on reading the literature, that 'dependence' is defined in a circular manner; LDCs are poor because they are dependent, and any characteristics that they display, signify dependence." They found that, "in the usage of the dependency school 'dependence' is meant to describe certain characteristics (economic as well as social and political) of the economy as a whole and is intended to trace certain processes which are casually linked to its underdevelopment and which are expected to adversely affect its development in the future."

7.6.1.1 Dependency Theory: A Historical International Process

The economists who explained dependency theory can be classified as Marxists, Neo-Marxists and Structuralists. Todaro (1994) classifies them under: the Neo-colonial Dependence Model, the False Paradigm Model and Dualistic-Development Thesis. But, Todaro's categorization of Dependency streams of thought does not include all that is contained in writings of the dependency theorists. Robert H. Bates (1981) identifies four unifying elements as viewed by dependency economists: i) Identification of underdevelopment with the expansion of industrial capitalist countries; ii) Development and underdevelopment are parts of a unified system; iii) Underdevelopment is a persistent natural condition, not a temporary, pre-capitalist stage; and iv) Dependence affects internal politics, society and culture.

In short, different explanations given in different terms on dependency theory as a historical international process can be explained as follows.

Frank, Santos, Sunkel, Amin and Furtardo hold the view that the present economic and socio-political conditions prevailing in the periphery are the result of a historical international process. Dos Santos views that development emerged as a global historical phenomenon due to formation, expansion and consolidation of the capitalist system which is known as dependent capitalism. Both the DCs (developed countries) and LDCs (Less Developed Countries) are integral parts of the capitalist system. But, the global system is such that the development of the centre occurs at the expense of underdevelopment of the periphery. Therefore, Meier (1965) and Volker (2004) characterize underdevelopment of the periphery as the "Siamese Twin" of development at the centre.

Frank (op. cit.) recorded that it is the world capitalist system which produced underdevelopment in the past and generates underdevelopment in the present as well. This has led to "the development of underdevelopment". Frank found the process of 'development of underdevelopment' as below:

i) Many countries in the periphery have been incorporated into the world economy since the early days of colonialism.

ii) Such peripheral countries have become capitalist economies through incorporation into the world economy.

iii) The incorporation of the peripheral countries in the world economy has led to "metropolis-satellite chain" in which the surplus generated at each level in the periphery is successively drawn off the centre. As a result, the periphery is impoverished and the centre is enriched.

According to Sanjay Lall, "the development of underdevelopment" may be viewed as leading to immiseration, i.e. the growing poverty of the mass of the population in the periphery.

7.6.1.2 Technological Dependence

The periphery countries use excessively capital-intensive technologies imported from the developed countries. But, these technologies are inappropriate to the production and consumption needs of less-developed countries. These technologies are sold by multinational corporation (MNCs) of developed

countries. The technological dependence arises as they cannot innovate them. They lack information about the availability of appropriate technologies and hence weak bargaining power which leads to exploitation of the poor countries. MNCs resort to economic and political distortions in less-developed countries. Some of the economic distortions created by MNCs are transfer of technologies to less-developed countries by restricting their right to use or change or transfer according to discretion or requirements. This leads to their total technological dependence on MNCs. Capital-intensive technologies have limited labour absorption capacity and thus, add to unemployment in less-developed countries. As a result, social tensions are created by worsening the distribution of income. There are large wage differentials between workers employed in the branches of MNCs and those engaged in local firms in LDCs. This leads to income inequalities. Both, Frank and Santos explain technological dependence perpetrated by MNCs. The centre has spread its monopoly to the peripheral countries through technological transfer. MNCs also create political distortions in the peripheral countries by influencing their internal politics by bribing legislators not only directly but also indirectly. They offer high posts in the local branches to the friends and relatives of the local politicians and bureaucrats. Moreover, they influence laws, politics and foreign policy of less developed countries. In short, technological dependence subverts monetary and fiscal policies of host-countries.

7.6.1.3 Dependence on Foreign Capital

The peripheral or less-developed countries are heavily dependent on the centre for foreign capital. Foreign capital leads to "external orientation" of less-developed countries by exporting primary commodities, importing manufactures and making them dependent for industrialization of their economies. According to Sunkel (1969), it is the stagnation of agriculture, high concentration of primary commodities for exports, high foreign exchange content of industrialization and growing fiscal deficit in the periphery countries which necessitate foreign financing for them. In his views, the foreign investors exploit less-developed countries for making choice of projects, making decisions on pricing, supply of equipments, know-how and personnel, etc. Thus, they impose a development pattern that is not compatible with local needs. Moreover, the dependence on foreign capital leads to a much higher outflow in the form of declared profits, royalties, transfer pricing, payment of principal and interest to foreign investors of the centre. Debt service and repayments drain "third world wealth." Thus, foreign investment is the biggest sign of exploitation of the periphery.

7.6.2 Trade and Unequal Exchange

Dependency theorists (economists) contend that developed countries exploit less-developed countries of the periphery by forcing them to specialize in the export of primary products with inelastic demand with respect to both price and income. So, they "continue to face stagnant export earnings often coupled with disruptive, short-term fluctuations in prices." This has created shortage of foreign exchange and balance of payment deficit in LDCs.

Santos (1970) puts two reasons for BOP deficit:

a) DCs keep the prices of their exports to LDCs very high and that of their imports from LDCs very low, and

b) Foreign capital from DCs controls major sectors of LDCs with the result that there are large outflows of profit, interest and principal.

Further, trade between the centre (DCs) and the periphery (LDCs) is characterized by unequal exchange. Dependency economists attach different meanings to unequal exchange. According to Sutcliffe (1972) unequal exchange means that "exporters in industrialized countries possess more monopoly power than the exporters of underdeveloped countries". As a result, it leads to unfavorable terms of trade for the latter. To Immanuel (1972), it is the differences in techniques of production and differences in wages which lead to unequal exchange in trade between both countries. According to Amin (1976), unequal exchange between the periphery and the centre is due to differences in wages between the two. To Amin, dependency is necessary to generate surplus value in the periphery even though it leads to unequal exchange. The wages are higher in the centre due to higher productivity and lower in the periphery due to lower productivity. The "absentee" capitalists of the centre that dominate the periphery's exporting sector find it profitable to produce and export commodities because of higher rate of surplus value in the periphery.

7.6.3 Dualism

The dualism is explicit in the views of the dependency theorists. Internationally, the countries are divided into advanced and less-developed countries. There is also domestic dualism with the co-existence of an advanced capitalist system and an indigenous pre-capitalist backward system. The interrelationships between the two systems are such that the developed region pushes down underdeveloped region with the result that there is 'development of underdevelopment'.

At the international level, it leads to the dominance of the centre and dependence of the periphery through various methods such as the following:

a) By encouraging the flow of foreign investment and capital-intensive techniques into LDCs through MNCs;

b) By controlling scarce raw materials and natural resources in LDCs;

c) By encouraging exports of primary products of LDCs and manipulating their prices to DCs' own advantage;

d) By adopting trade and aid policies against the interests of LDCs and increasing their dependence on DCs;

e) By encouraging 'consumerism' through widespread advertisement and exporting consumer goods to LDCs, thereby creating cultural dependence on DCs;

f) By encouraging the elite and rich to study professional courses in DCs, and luring the skilled and professional people to migrate to DCs by offering them high salaries; thus leading to "brain drain" from LDCs; and

g) By perpetuating international dependence of LDCs by often uninformed, biased, and ethnocentric international "expert advisers" from international agencies located in DCs that render "faulty and inappropriate advice" to LDCs.

Within the dependent LDCs domestic dualism occurs. According to Cardoso, Fernando Henrique (1979), this dualism is due to "an internal structural fragmentation connecting the most "advanced" parts of their economies to the international capitalist system. Sunkel (op. cit.) describes it as "internal polarization". Domestic dualism is characterized by the existence of a modern,

capitalist and relatively developed sector producing primary products for export with relatively advanced technology on the one side; and an isolated, subsistence-based, feudal, or pre-capitalist and more underdeveloped sector comprising the vast majority of the population on the other side. The modern sector has been mainly affected by intimate economic relations with the centre. Petroleum, mining, plantation and manufacturing industries are controlled and run by multi-nationals. They exploit "the backward, marginal and dependent groups" in poor countries. They derive high incomes from their links with the parent multi-nationals. This reflects social and cultural dependence, besides economic dependence of LDCs on advanced countries.

Frank (1967) calls the "dual society" thesis as a false hypothesis. According to him, historically the two different sectors of LDCs can be linked closely to the world capitalist system. Capitalism influences the entire economy of poor countries. It makes backward regions "internal colonial satellites" of international capitalism and its domestic allies in LDC. It is, therefore, not a fact that the backward rural sector is underdeveloped because it has not been touched and influenced by the capitalist system. In reality, according to Frank "the capitalist system over the past centuries has effectively and entirely penetrated even the apparently most isolated sectors of the underdeveloped world." Thus, underdevelopment is not due to the existence of pre-capitalist institutions and capital shortage in isolated regions, but the result of the very same historical process which generated the development of capitalism in itself. According to a version, the participation of satellite countries in world trade, division of labour, and capitalism has led to their underdevelopment.

7.6.4 Critical Evaluation

The dependency theory highlights the centre-periphery relationship which has resulted in the 'development of underdeveloped' periphery. It offers good explanation focusing on the historical causes of their underdevelopment. It brings out how internal socio-economic and political structures of less-developed countries are influenced by external forces of developed countries and to what extent these forces are responsible for underdevelopment of their counterparts.

Despite many merits of the theory, it has been criticized as under:

a) It fails to explain how external forces generated by capitalization lead to development of the periphery countries and advanced countries of the world.

b) Some critics found that dependency theorists (economists) explained underdevelopment in terms of explaining the trade relations between two countries. But, they ignored the problems of production and relationship of production in periphery countries.

c) There are number of dependency theories with a plurality of different views which explain the underdevelopment of the peripheral countries. Thus, it is not a coherent, systematic and comprehensive view of theory.

d) The theory is weak as it ignores existence and role of different classes in the production and appropriation of economic surplus. Thus, it neglects the role of internal class structure in explaining underdevelopment of these countries.

e) According to this theory it is the exchange of surplus product of LDC's and its appropriation by DCs which use both development and underdevelopment of the periphery. But, it does not throw light on how it is produced and appropriated.

f) Many critics are of the view that the spread of capitalism in less-developed countries has led to development rather than underdevelopment of many less-developed countries. For example, China was underdeveloped due to political factors, internal disorder, etc rather than the spread of capitalism. On the contrary, Shanghai, Manchuria and Hong Kong developed due to capitalist penetration. Cuba and East European countries remained underdeveloped due to their political relations with the Soviet Union.

g) Some dependency economists argue that foreign investment and MNCs exploit LDCs by way of profit remittances, royalties, etc. But, they ignore their contribution to the development of LDCs when they reinvest their profit in increasing production for domestic market and export.

h) According to Sanjay Lall (1975), characteristics of dependence are not clear. He argued that the characteristics of "dependence" to be found in LDCs are also to be found in "non-dependent" economies. They are characteristics of capitalist development in general and not of dependent economies alone.

i) Griffin and Gurley (1985) hold the strong view that the dependency theory fails to explain the relationship between the centre and the periphery in terms of the market forces.

j) The dependency theory is not true empirically. Frank and other dependency theorists (economists) have tried to base their analysis on the experiences of Latin American countries. But, they have not provided data to test the theory.

k) Sanjay Lall (op.cit.) further opines that the concept of 'dependence' to be useful as a theory must satisfy two criteria: i) It must lay down certain characteristics of dependent economies not found in non-dependent economies; and ii) these characteristics affect adversely the course and pattern of development of such economies. If crucial features of 'dependence' are found in both dependent and non-dependent economies, the first criterion is not satisfied and the theory is defective. Thus, the dependency theory fails to satisfy the two criteria laid down by Lall.

l) Sanjay Lall has further criticized the dependency economists for not defining the word "dependency" clearly. According to him, "dependency" is defined in a circular manner. Sanjay Lall concludes that "the concept of dependence as applied to LDCs is impossible to define and cannot be related to a continuance of underdevelopment".

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

5) Critically evaluate the dependency theory.

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7.7 LIBERAL THEORY OF DEVELOPMENT

Liberalism is the belief in the importance of *liberty* and *equal rights.* Liberals espouse a wide array of views depending on their understanding of these principles, but most liberals support such fundamental ideas as *constitutionalism, liberal democracy, free and fair elections, human rights, free trade,* and the *freedom of religion.* These ideas are widely accepted, even by political groups that do not openly profess a liberal *ideological orientation.* Liberalism encompasses several *intellectual trends* and *traditions,* but the dominant variants are *classical liberalism,* which became popular in the eighteenth century, and *social liberalism,* which became popular in the twentieth century.

Today, liberals are *organized politically* on *all major continents.* They have played a decisive role in the growth of *republics,* the spread of *civil rights* and *civil liberties,* the establishment of the *modern welfare state,* the institution of *religious toleration* and *religious freedom,* and the development of *globalization.* Political scientist Alan Wolfe (2009) wrote, "liberalism is the answer for which modernity is the question".

Liberals in the 19th century wanted to develop a world free from government intervention, or at least free from too much government intervention. They championed the ideal of *negative liberty,* which constitutes the absence of coercion and the absence of external constraints. They believed governments were cumbersome burdens and they wanted governments to stay out of the lives of individuals. Liberals simultaneously pushed for the expansion of *civil rights* and for the expansion of *free markets* and *free trade.* The latter kind of economic thinking had been formalized by Adam Smith (1776), in his monumental work "Wealth of Nations", which revolutionized the field of economics, established the "invisible hand" of the free market as a self-regulating mechanism that did not depend on external interference. Sheltered by liberalism, the *laissez-faire* economic world of the 19th century emerged with full tenacity, particularly in the United States and in the United Kingdom.

7.7.1 Major Themes of Liberalism

Though all liberal doctrines possess a common heritage, scholars frequently assume that these doctrines contain "separate and often contradictory streams of thought". The objectives of *liberal theorists and philosophers* have differed across various times, cultures, and continents. The diversity of liberalism can be gleaned from the numerous adjectives that liberal thinkers and movements have attached to the very term *liberalism*, including *classical, egalitarian, economic, social, welfare-state, ethical, humanist, deontological, perfectionist, democratic,* and *institutional*, to name a few. Despite these variations, liberal thought does exhibit a few definite and fundamental conceptions. At its very root, liberalism is a philosophy about the meaning of humanity and society. Political philosopher John Gray (1982) identified the common strands in liberal thought as being *individualist, egalitarian, meliorist,* and *universalist.* The individualist element avers the ethical primacy of the human being against the pressures of social collectivism; the egalitarian element assigns the same moral worth and status to all individuals; the meliorist element asserts that successive generations can improve their socio-political arrangements; and the universalist element affirms the moral unity of the human species and marginalizes local cultural differences.

The meliorist element has been the subject of much controversy — defended by thinkers such as Immanuel Kant, who believed in human progress, while suffering from attacks by thinkers such as Rousseau, who believed that human attempts to improve themselves through social cooperation would fail. The liberal philosophical tradition has searched for validation and justification through several intellectual projects. The moral and political suppositions of liberalism have been based on traditions such as *natural rights* and *utilitarian theory*, although sometimes liberals even requested support from scientific and religious circles. Through all these strands and traditions, scholars have identified the following major common facets of liberal thought:

- believing in equality and individual liberty,
- supporting private property and individual rights,
- supporting the idea of limited constitutional government, and
- recognizing the importance of related values such as pluralism, toleration, autonomy, and consent.

7.7.1.1 Classical and Modern Liberalism

Thomas Hill Green was one of the most influential *liberal philosophers* ever. In *Prolegomena to Ethics* he (Green, 1884) established the first major foundations which later became known as *positive liberty.* In a few years, his ideas became the *official policy* of the *Liberal Party* in Britain, precipitating the rise of *social liberalism* and the modern *welfare state.*

Early liberals, including Thomas Hobbes, John Locke and Baruch Spinoza attempted to determine the purpose of government in a liberal society. To these liberals, securing the most essential amenities of life — *liberty* and *private property* among them — required the formation of a "sovereign" authority with universal jurisdiction. In a natural state of affairs, liberals argued, humans were driven by the instincts of survival and self-preservation, and the only way to escape from such a dangerous existence was to form a common and supreme power capable of arbitrating between competing human desires. This power could be formed in the framework of a civil society that allows individuals to make a voluntary *social contract* with the sovereign authority, transferring their *natural rights* to that authority in return for the protection of life, liberty and property. These early liberals often disagreed in their opinion of the most appropriate form of government, but they all shared the belief that liberty was natural and that its restriction needed strong justification. Liberals generally believed in limited government, although several liberal philosophers decried government outright, with Thomas Paine (1776) writing that "government even in its best state is a necessary evil".

As part of the project to limit the powers of government, various liberal theorists — such as James Madison and the Baron de Montesquieu — conceived the notion of separation of powers, a system designed to equally distribute governmental authority among the *executive, legislative,* and *judicial* branches. Governments had to realize, liberals maintained, that poor and improper governance gave the people authority to overthrow the ruling order through any and all possible means — even through outright violence and revolution, if needed. Contemporary liberals, heavily influenced by *social liberalism,* have

continued to support limited constitutional government while also advocating for state services and provisions to ensure equal rights. Modern liberals claim that formal or official guarantees of individual rights are irrelevant when individuals lack the material means to benefit from those rights, urging a greater role for government in the administration of economic affairs. Early liberals also laid the groundwork for the separation of church and state. As heirs of the *Enlightenment,* liberals believed that any given social and political order emanated *from human interactions,* not from *divine will.* Many liberals were *openly hostile* to *religious belief* itself, but most concentrated their opposition to the union of religious and political authority — arguing that faith could prosper on its own, without official sponsorship or administration from the state.

Beyond identifying a clear role for government in modern society, liberals also have obsessed over the meaning and nature of the most important principle in liberal philosophy: *liberty*. From the 17th century until the 19th century, liberals — from Adam Smith to John Stuart Mill —conceptualized liberty as the absence of interference from government and from other individuals, claiming that all people should have the freedom to develop their own unique abilities and capacities without being sabotaged by others. Mill (1859), in '*On Liberty*', one of the classic texts in liberal philosophy, proclaimed that "the only freedom which deserves the name is that of pursuing our own good in our own way". Support for *laissez-faire capitalism* is often associated with this principle. Friedrich Hayek (1944) argued in *The Road to Serfdom* that reliance on free markets would preclude totalitarian control by the state.

Besides liberty, liberals have developed several other principles such as *equality, pluralism,* and *toleration* which are important to the construction of their philosophical structure. Highlighting the confusion over the first principle, Voltaire (1763) commented that "equality is at once the most natural and at times the most chimeral of things". All forms of liberalism assume, in some basic sense, that individuals are equal. In maintaining that people are *naturally* equal, liberals assume that they all possess the same right to liberty. In other words, no one is inherently entitled to enjoy the benefits of liberal society more than anyone else, and all people are *equal subjects before the law.* Beyond this basic conception, liberal theorists diverge on their understanding of equality. American philosopher John Rawls (1971) emphasized the need to ensure not only equality under the law but also the equal distribution of material resources that individuals required to develop their aspirations in life. Libertarian thinker Robert Nozick (1974) disagreed with Rawls, championing the former version of *Lockean equality* instead. To contribute to the development of liberty, liberals also have promoted concepts like pluralism and toleration. By pluralism, liberals refer to the proliferation of opinions and beliefs that characterize a stable social order. Unlike many of their competitors and predecessors, liberals do not seek conformity and homogeneity in the way that people think; in fact, their efforts have been geared towards establishing a governing framework that harmonizes and minimizes conflicting views, but still allows those views to exist and flourish. For liberal philosophy, pluralism leads easily to toleration. Since individuals will hold diverging viewpoints, liberals argue, they ought to uphold and respect the right of one another to disagree. From the liberal perspective, toleration was initially connected to *religious toleration.* Spinoza (1670) condemns "the stupidity of *religious persecution* and ideological wars". Toleration also played a central role

in the ideas of Kant and John Stuart Mill. Both the thinkers believed that society will contain different conceptions of a good ethical life and that people should be allowed to make their own choices without interference from the state or other individuals.

7.7.2 Criticism and Support

Liberalism has drawn both criticism and support in its history from various ideological groups.

Some scholars suggest that liberalism gave rise to *feminism,* although others maintain that *liberal democracy* is inadequate for the realization of feminist objectives. *Liberal feminism,* the dominant tradition in *feminist history,* hopes to eradicate all barriers to *gender equality* claiming that the continued existence of such barriers eviscerates the individual rights and freedoms ostensibly guaranteed by a liberal social order. British philosopher Mary Wollstonecraft in *A Vindication of the Rights of Woman* published in 1792 expanded the boundaries of liberalism to include women in the political structure of liberal society which is widely regarded as the pioneer of liberal feminism.

Conservatives have also attacked liberalism, what they perceive to be the reckless liberal pursuit of progress and material gains, arguing that such preoccupations undermine traditional social values rooted in community and continuity. However, a few variations of conservatism, like *liberal conservatism,* expound some of the same ideas and principles championed by *classical liberalism*, including "small government and thriving capitalism".

Even more uncertain is the relationship between liberalism and *socialism.* Socialism began as a concrete ideology in the 19th century with the writings of Karl Marx, and it too — as with liberalism and conservatism — fractured into several major movements in the decades after its founding. Marx rejected the foundational aspects of liberal theory, hoping to destroy the liberal distinction between society and the individual while fusing the two into a collective whole designed to overthrow the developing capitalist order of the 19th century. After Marx, the most prominent branch of socialism eventually became *social democracy,* which can be broadly defined as a project that aims to correct what it regards as the intrinsic defects of capitalism by reducing the inequalities that exist within an economic system. Several commentators have noted strong similarities between *social liberalism* and social democracy, with one political scientist even calling *American liberalism* "bootleg social democracy" due to the absence of a significant social democratic tradition in the United States that liberals have tried to rectify. Another movement associated with modern democracy, *Christian democracy,* hopes to spread *Catholic social ideas* and has gained a large following in some European nations. The early roots of Christian democracy developed as a reaction against the *industrialization* and *urbanization* associated with *laissez-faire* liberalism in the 19th century. Despite these complex relationships, some scholars have argued that liberalism actually "rejects ideological thinking" altogether, largely because such thinking could lead to unrealistic expectations for human society.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

6) Critically examine the impact of liberalism.

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7.8 GANDHI'S ECONOMIC IDEAS AND DEVELOPMENT

To Mahatma Gandhian, human beings themselves were wealth, not gold and silver. "The final consummation of all wealth is in producing as many as possible, full-breadth, bright-eyed and happy-hearted human beings" (Gandhi, 1951, p.32). He believed that country was the richest which nourished the greatest number of happy individuals; and that man was the richest who, after fulfilling the mission of his own life and perfecting its functions to the maximum extent, influenced the lives of others (ibid, p.57). Mahatma Gandhi held that economic motives and activities should be governed by ethical considerations. To him, economics and ethics were inseparable.

In the West, people generally hold the view that the main duty of man is to promote the material happiness of the majority of mankind; and by happiness they simply mean physical happiness and economic prosperity. It does not matter very much to them if the laws of morality are broken for the sake of that happiness.

Rejecting Western materialism which has no ethical basis, Gandhi praised the work of John Ruskin who contended in his *Unto This Last* that people could become happy only if they obeyed moral laws. To Gandhi, economics was a practical science which suggested practicable measures for the maximisation of human welfare. He laid great emphasis on human values; and condemned the monetary basis of human relations.

Mahatma Gandhi (1869-1948) who was a great freedom fighter and is a celebrated the father of the nation' had certain positive economic ideas based on non-violence and truth, which have considerably moulded economic thinking and economic

policies in India. Gandhian economic thought, which presets a counter theory to the modern economics of the West, aims at revitalizing an under-developed economy that might develop into a full–fledged, stabilized economic system. All the economic ideas of Mahatma Gandhi did not develop at one time. They developed in three distinct phases, viz. i) up to 1919, ii) between 1919 and 1934, and iii) between 1934 and 1948. In the *first phase*, he rejected Western civilization, method of production, use of machine, etc., and developed altogether an anti-materialistic approach to different problems, which is evident from his book *Hind Swaraj* (1909). It was, in a sense, *a negative phase.* The *second phase* witnessed the evolution of his economic ideas based on the Swadeshi Movement, the development of a *positive counter-theory* to Western civilization. The third phase was a practical one in which he evolved the *ideal of Sarvodaya;* and prepared a concrete programme for the regeneration of village economy, revitalization of village industries and decentralization of productive organization.

The important economic ideas of Gandhi and their relevance to economic development of India are discussed below.

7.8.1 Non-violent Economy

To Mahatma Gandhi, there was no industry and no human activity without a certain amount of violence; but what he wanted was to make sincere efforts to minimize it. His firm belief was that nature produced enough for satisfaction of the wants of all people, and if everybody took only that much which was sufficient for him/her, there would be no pauperism and no starvation. He felt that those (including himself) who had commodities at their disposal or under their possession, had no right to possess anything unless the millions of hungry and poor were fed and clothed; and this called for an adjustment of wants. Mahatma Gandhi defined a non-violent occupation as one "which is fundamentally free from violence, and which involves no exploitation or envy of others (Gandhi, 1954, p.37-38). He hoped that economics would help in eliminating poverty, reducing the inequality of wealth and income; and would, at the same time, lay the foundation of a harmonious society in which the individual could, without any hindrance, develop his personality. According to him (Ibid, p.71), the main purpose of true economics, which stands for social justice and moral values and which never militates against the highest ethical standard, was to direct the unbounded expansion of material happiness towards the fulfillment of real progress, i.e. moral progress.

Decentralisation: Mahatma Gandhi had seen how the centralisation of economic functions had created difficulties and irregularities. He believed that centralisation could not continue without adequate force. When production is carried on a large-scale basis in mills and factories, distribution is not regulated automatically, but in a round-about way in which there is great scope for speculative activities and fraud. He further believed that a mechanised economy was based on violence; and that in a world of centralised functions a man could not lead his life fully and happily. He did not approve of the State-controlled economy of Russia -- as it was based on force (Gandhi, 1934). He, therefore, advocated a decentralised economy, i.e. production at a large number of places on a small scale. Mahatma Gandhi hated privilege and monopoly, and said that whatever could not be shared with the masses, was a taboo (The Harijan, 1933). As the concentration of production in particular areas created the difficulties of distribution, he suggested

the localisation of production in those places where the distribution of those commodities was required. Decentralisation was also essential for a non-violent State of his conception; Such a State cannot be built in a factory civilization. He wanted decentralisation from the initial stage of the industry; it was the quickest and the best method of building up the economy of the country. It is interesting to note that Mahatma Gandhi did not object to the centralisation of heavy industries provided they did not hamper the growth of cottage industries and formed only a small part of the national activity (Tendulkar, 1954, pp.166-170).

The concentration of industrial capacity in big factories has resulted in the concentration of large populations in cities. Moreover, it does not give individuals free access to the means of small-scale production, personal liberty and self-government. Though nationalisation of big industries also will not solve the problems of a democracy, nationalisation strengthens the State; it does not lead to dependence on bosses (Gandhi, 1938, p.29).

7.8.2 Use of Machines

If the humanity is to take advantage of science, it should regulate the production of useful things in the quantities needed by the society; and eliminate that of useless and harmful things. Science should be used to regulate all aspects of the economic life of the community. Before introduction of the factory system and of machines, the economy of an agricultural country (with its cottage industries) was more equitably regulated than now under capitalism. Mahatma Gandhi was firmly convinced that the modern technological civilization was responsible for human frustration, violence and war. It was also responsible for multiplication of the material wants. Comparing the machinery with a snake hole, he enumerated the evils of its growing use. He called modern civilization (which aims at destroying time and space) as satanic. He believed that the large-scale use of machinery -- the main symbol of modern civilization — was a great sin. To him, the craze for machinery created a class of wealthy men; and caused an uneven distribution of wealth. Increasing mechanization, he believed, would strengthen the foreign rule; it would not terminate it (Gandhi, 1926, mentioned in Prabhu and Rao, 1956).

Nevertheless, Mahatma Gandhi was not against the use of all sorts of machines. He objected to the way in which machines were used. He was, in a sense, against the indiscriminate multiplication of machinery, destructive machinery and increasing mechanization, because it displaced human labour and created unemployment. He did not want the replacement of hand-labour by power-driven machines. He welcomed simple tools and implements which helped workers and lightened the burden of the millions of cottage workers. To him, that machine was bad which ceased to help the individual worker and encroached upon his individuality (Ibid).

Mahatma Gandhi said: "... But I am a socialist enough to say that such factories should be nationalised or State-controlled" (Ibid, p.43). We, therefore, conclude that he was not against the establishment of such factories provided they worked under most ideal conditions, for the benefit of humanity -- the motive being love, not greed. His main consideration was that the workers should not be rendered unemployed on account of the use of machines (Prabhu and Rao, 1956, pp.119-124).

7.8.3 Regeneration of Villages

It is well known that the villages of ancient India were self-sufficient and economically self-dependent. In those days, production, distribution and consumption were almost simultaneous and in adjacent areas. Mahatma Gandhi often said that the real India was to be found in villages, not in cities and towns. Mahatma Gandhi further described lack of supplementary occupations, inadequacy of medical attention, insanitary conditions and extreme poverty as the root-causes of exploitation of villagers. He wanted every village to develop into a little republic independent of its neighbours in so far as its vital wants are concerned. He evolved the ideal of *Village Swaraj*; and enumerated the following conditions for an *ideal village.*

- There should be orderliness in the structure of the village.
- Every village should have fruit-trees.
- It should have a dharmashala and a small dispensary.
- It should be self-sufficient in so far as food and clothing is concerned.
- The roads and lanes of the village should be kept clean so that "in the land of bare-footed pedestrians" nobody should hesitate to walk.
- The temple/mosque should be kept beautifully clean.
- The lanes of the village should have gutters for draining off water.
- Every village should be capable of defending itself from robbers and wild animals.
- It should have and maintain a public hall, a school and a theatre hall.
- It should have efficient water supply arrangements.
- It should have recreation facilities -- a playground, a reserve for the cattle, etc.
- If some space is left, it should grow money (commercial) crops except tobacco, opium, etc.
- Education in the village should be made compulsory up to the final basic standard.
- All activities of the village should be conducted on co-operative lines,
- The government of the village should be conducted by a Panchayat of 5 persons duly elected every year by adult villagers.
- The village panchayat would enjoy judicial, legislative and executive powers.
- The service of village guards should be compulsory -- they should be selected by rotation,
- The caste system should not be practiced.

If all villages of the country could come up to the ideal conceived by him, Gandhi was confident that India would be free from most of her worries (Ibid, p.327).

7.8.4 Khadi Industry

Calculating that every Indian required at least 13 yards of cloth per year (in 1920 when he wrote an article in the Young India under the title *Swadeshi*) and believing that the multiplication of mills could not solve the problem of cloth-supply, Mahatma Gandhi stressed the need for the development of khadi industry. Khadi to him was "the symbol of unity of Indian humanity, of its economic freedom and equality", and to Jawaharlal Nehru it was "the livery of India's freedom." The khadi mentality means the decentralization of production and distribution of the necessaries of human life (Andrews, 1930, p.149). To Mahatma Gandhi, the charkha was the symbol of non-violence. His slogan was "Swaraj through Spinning." The charkha was the main thing to revitalize the village economy. Once he said: "In losing the charkha we have lost our left lung" (Anjaria, 1970, p.8).

When Mahatma Gandhi proposed the charkha as a major means of solving the problem of India's poverty, he was immediately ridiculed as a deluded reactionary, a misguided crank; and the idea was called stupid, fantastic, childish and antiquated. Several objections were raised to the khadi movement. *Firstly*, some middle class people argued that khadi was not an economic proposition because its roughness caused it to soil more quickly than the mill-made cloth. It required more frequent washing; and its thickness used up more soap, hence for a large family the khadi wear was not economic but more expensive. *Secondly*, wages paid to spinners were so low as spinning could not attract a large number of people, *Thirdly*, the khadi programme might be useful as a temporary measure; as a permanent affair it would be absurd.

Regarding the second objection, Mahatma Gandhi contended that the charkha was not proposed for the majority of people as a full-time occupation; the third objection was rejected when he reiterated that the development of khadi industry sought to exterminate the monster of abject poverty from Indian villages. It is of interest to quote Gregg "Khaddar will always be useful to protect the economic society of the poorer groups of peasants, and as these groups are large, their economic stability is a matter of great importance to the nation" (Gregg, 1934, p.67).

The evils of industrialization can be removed by the khadi industry which influences the entire masses; and leaves no room for surplus value, no room for interest, rent or profit. The entire income goes to khadi workers. Socialism aims at the nationalization of the means of production; but there is no question of nationalization of the khadi industry as the only instruments are the charkha and the loom which an average villager can afford. Socialism believes in revolution, but the charkha has brought about another type of revolution; it has not only affected the economics of the masses but also of the classes (Kripalani, 1961, p.8).

Does the production of khadi add to national wealth? Yes, it creates some wealth. It must be borne in mind that khadi production is meant for the compulsory leisure or unemployment of the village people. It provides a fruitful employment; and supplements their slender earnings. It increases the purchasing power of the nation. The villager when he weaves khadi, gets it cheaply. The saving on account of the use of khadi is to the extent it replaces the use of foreign cloth. The charkha and khadi are sound propositions from the points of view of: (a) diminution of unemployment, (b) increase in national income, (c) increase in purchasing power, and (d) increase in the collective wealth of the nation.

7.8.5 Doctrine of Trusteeship

While talking to Horace Alexander, Mahatma Gandhi remarked that the capitalist who had amassed a large sum, was a thief (Andrews, op. cit. p.7). He believed that if a person had inherited a big fortune or had collected a large amount of money by way of trade and industry, the entire amount did not belong to him. What belonged to him was the right to an honorable livelihood "no better than that enjoyed by millions of others." The rest of the wealth belonged to the community; and must be spent on its welfare.

Mahatma Gandhi predicted a violent and bloody revolution unless there was a voluntary abdication of riches and the power that riches gave and sharing them for the common good. He wanted to avoid that ugly situation; and as he aimed at creating a permanent stability of economic equality, he enunciated the doctrine of trusteeship. He wanted to see that class-struggle vanished; and persons should be expropriated by the use of force. In this connection he observed: "Society will be the poorer for it will lose the gifts of a man who knows how to accumulate wealth".

Mahatma Gandhi considered it desirable to appeal to the basic human principles of reason and love to persuade capitalists to realise that the capital in their hands represented the fruits of the labour of others and it should be treated as such. They should now realise the evils and dangers of accumulation and feel that it would be to their larger interests if they used their capital for their countrymen rather than for their personal comforts. Capitalists would then exist as trustees only; and workers would have ample food, sanitary dwellings and education for their children.

Mahatma Gandhi's conception of trusteeship was that all social property should be held in trust. It would be meant for all people whether rich or poor, capitalists being trustees would take care not only of themselves but also of others. Some of their wealth (not required for their personal needs) would be used for the rest of the society. Poor workers, under trusteeship, would regard capitalists as their benefactors; and would place every faith in their good intentions. If such a trusteeship were established the welfare of workers might increase; and capitalist-worker clashes might be avoided.

Mahatma Gandhi believed that trusteeship would help considerably in realising a State of equality on Earth (Gandhi, 1951, p.61). He was confident that the *doctrine of trusteeship would survive all other theories* as it was supported by philosophy and religion. If wealthy persons did not act up to this ideal, it did not mean that the doctrine was false. Rather, it showed the weakness of rich people Whenever he suggested that capitalists should become trustees, he had always in view the example of Jamna Lal Bajaj who had established the Jamna Lal Seva Trust, Wardha. He never said that all capitalists would become trustees; but he felt that if all wealthy persons tried to emulate this example, the dream of economic equality could be realised. He expected rich men to take the lead in the matter, not the poor who have nothing to share with anybody except their pauperism and abjectness (Tendulkar, op. cit. p.176).

Another important factor to be taken into account was the reformation of the individual. As Mahatma Gandhi conceived, rich men should be conscious of the society in which they lived; and should not use their wealth arbitrarily. They

should use their talents not only for themselves but also for the entire society. They should observe moral laws; and earn by fair means. The poor should, on the other hand, believe in the good intentions of the rich. In this way, there would be mutual trust and confidence with the help of which the remarkable ideal of economic equality could be achieved.

7.8.6 Labour Welfare

One of the important fields where Mahatma Gandhi extended his fight for economic equality was the factory. He saw that workers were subjected to gross injustice and the treatment meted out to them was below dignity. To him, the employment of children was a national degradation. He always pleaded for shorter hours of work and more leisure so that workers might not be reduced to the condition of beasts. He also demanded safety measures inside factories. Mahatma Gandhi laid emphasis on the welfare of the worker, his dignity and proper wages. In the *Harijan* dated June 9, 1946 he wrote that all useful work should bring to the worker the same and equal wages. Until then, he should be paid at least that much which could feed and clothe himself and his family. In .order to improve the condition of the worker, first of all he laid claims on a minimum living wage (Mathur and Mathur, 1966, p.157) so that a family of 4 to 6 members might live a human life. He wrote as far back as 1920 that the worker should get more wages, and should be given less work to do, so that the following four things might be guaranteed to him: clean house, clean body, clean mind and a clean soul.

In so far as the relation between labour and capital is concerned, Mahatma Gandhi always suggested harmony between them. He argued that if the distinction of high and low disappeared, it would have a healthy reaction on all aspects of life. Consequently, the struggle between labour and capital would come to an end; and would give place to co-operation between them. According to him, capital should be labour's servant, not its master (Tendulkar, op. cit., p.382). Moreover, he believed in the formation of labour unions. If the rights of workers were not conceded, they could go on a strike which should be based on non-violence and truth (Gandhi, 1951, pp.89-112).

7.8.7 Food and Population

During 1943-44 when the Bengal Famine look place, there was an acute food shortage throughout India. In the beginning, Mahatma Gandhi believed that this scarcity was artificial, i.e. it had been created by food-grains dealers. But, when he wandered in Madras, Bengal and Assam and received reports from other parts of the country, he came to believe that food shortage was a reality. The government report expressing the fear of food shortage immediately increased the prices of food grains. He advised businessmen not to adapt speculative activities, and asked them not to add to the distress which had been caused by the incompetence of the government (Gandhi, 1947, p.7).

In order to solve the problem of food shortage, Mahatma Gandhi suggested the following measures (Ibid, pp.9-10).

- Every person should curtail his/her requirements of food to the minimum, consistent with his/her health requirements; and where vegetables, milk, fruits and oil are available, the consumption of grain and pulses should be reduced.

- All flower gardens should be utilized for growing edibles.
- The military should also reduce the consumption of grains and pulses; and as military men are under a rigid discipline, they can easily carry out the measures of economy.
- Black-marketing should disappear altogether.
- Deep wells should be sunk by the government for the purpose of irrigation.
- Exports of oil seeds, oilcakes, etc., should be stopped. Oilcakes can serve the purpose of a good human food, if they are properly sifted.

It was in November 1947 that Mahatma Gandhi asked the government to remove food controls. In fact, he was against the food control order from the very beginning. As he believed, food control created an artificial scarcity, gave rise to fraud, intensified the black-market and killed the initiative of the people. They did not depend upon self-help; but rather became spoon-fed (Ibid, p.51).

One of the most important problems to which his attention had been drawn was the rapid increase in population for the control of which certain people had advocated family planning through the artificial methods of birth control. Mahatma Gandhi realized the necessity of birth control — not through the use of artificial methods but through self-control or brahmacharya —which he regarded as the "infallible sovereign remedy". In his opinion medical experts should discover the means of self-control rather than devising the contraceptives which made man and woman reckless; and resulted "in imbecility and nervous prostration" (Gandhi, 1944, p.234).

7.8.8 Exchange Economy

The Gandhian approach to exchange economy is based on the Swadeshi spirit according to which every Indian village would be "a self-supporting and self-contained unit exchanging only such necessary commodities with other villages where they are not locally producible" (Gandhi, 1944, p.69). The person who has accepted the discipline of Swadeshi would not mind "physical discomfort or inconvenience caused by the non-availability of certain things which he has been using. He would gradually learn to do without those things which up to this time he has been regarding as necessary for his life" (Ibid, p.70).

Mahatma Gandhi asked people not to worry about the non-availability of such things as pin and needle, because these were not manufactured in India. He was prepared to buy from other countries those commodities (like watches from Switzerland, surgical instruments from England, etc.) which were needed for his growth; but he was not prepared to buy an inch of cotton of the finest variety from England or Japan or any other country of the world because the importation of cloth had caused the ruin of the home industry; it had harmed the interests of the millions of inhabitants of this country. The guiding principle that he laid down in respect of all foreign goods was that those things should not be imported which were likely to prove harmful to the interests of the indigenous industry (Ibid, p.84).

Mahatma Gandhi recognized money as a token of exchange only. As suggested by Mahatma Gandhi, every village besides being self-sufficient in the production of its necessaries is expected to produce a certain percentage as its contribution to the cities. It means that only this surplus is to be exchanged.

7.8.9 Sarvodhaya

Sarvodhaya means the welfare of all. In order to provide justice to all and to make the nation prosperous Mahatma Gandhi suggested the payment of a just wage because if all were paid just wage, no one would be able to amass an unlimited fortune. In his scheme of Sarvodhaya, every individual would have equal opportunities for the satisfaction of his economic wants, Sarvodhaya would not be realised, as he thought, by laying emphasis on industrialism, but on the development of village industries (Adi H. Doctors, 1964).

In the Sarvodhaya Samaj all would live as equals. Let us now describe the constructive programme detailed by late Mahatma Gandhi (1944) and supplemented by Dr. Rajendra Prasad (1948). In order to raise the standard of living of the masses, attention has to be paid to cultivators and labourers. There should be no exploitation of cultivators and labourers by landlords and capitalists. Cultivators will organize their committees and industrial labourers their unions. Adults and children of school-going age should be provided with education -- the former to receive general and technical education in night schools, and the latter to receive basic education. In the village programme, attention will mainly be paid to the establishment and development of village industry, sanitation and hygiene. The village would be developed into a complete republic in itself (Ibid). Hand-spinning will help every village family; and the revival of Khadi industry, among others, will economically benefit all.

The Sarvodhaya programme also includes the creation of conditions conducive to economic equality and the achievement of communal harmony. After Mahatma Gandhi the work of Sarvodhaya has been taken up by eminent personalities like Acharya Vinoba Bhave and Jaya Prakash Narain. Though it will take time, it is expected that as a result of their strenuous work and constant guidance the Sarvodhaya plan comprising economic self-sufficiency, decentralization of power, regionalization of industries, development of cottage industries, minimization of the use of machinery and nationalization of big institutions/industries and public utility services, will be fully implemented with the fullest possible co-operation and support of people.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

7) Briefly explain Gandhi's ideas of Economic Development.

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7.9 LET US SUM UP

We have discussed different theories of development — Classical Theory of Economic Development, Neo-Classical Theory of Economic Development, Keynes' Theory of Economic Development, Karl Marx's Theory of Economic Development, Dependency Theory of Development, Liberal Theory of Development and Gandhian Theory of Development — touching upon different dynamics of development involved therein. We have also analysed each of these theories critically highlighting their advantages and disadvantages.

7.10 ANSWERS TO 'CHECK YOUR PROGRESS' QUESTIONS

1) *The main contribution of classical theorists to economic development is as given below.*

   a) Classists believe every member of society if left free to pursue his economic activities, he will maximize the production to the best of his ability and thereby contribute to the society.

   b) Their theory was based on principal of leissez-faire i.e. no intervention of state on individual's freedom of action.

   c) They advocated free trade which promotes savings and creates capital which sustains economic progress.

   d) Adam Smith assigned pivotal position to the division of labour for raising the level of output in the process of economic development.

   e) The primary source of capital accumulation is profit and wages; and rents are secondary. The profit or economic surplus is the difference between the market value of a finished product and its cost.

   f) To them, production is a function of capital, labour and land. Symbolically,

      $$y = f(K, L, N)$$

   g) They visualize the stationary state at the end of process of capital accumulation.

   h) As national income is the result of combined efforts of landlords, capitalists and labourers, it was distributed among them.

   i) The level of profits is determined by the supply of labour, which in turn depends on population growth and technological progress.

   j) Wage rate depends on wage fund.

   k) Population growth increases wealth only if it increases effective demand that leads to increase in wealth of a country.

   l) J. B. Say's law of market states "Supply creates its own demand". Hence, there is no overproduction or glut in the market.

2) *Critical evaluation of neo-classical theory of economic development:* The neo-classical economists Robert M. Solow, Nicholos Kaldor, J. E. Meade, T. W. Schulz and others contributed much to the understanding of the process of economic growth. Their theory of economic growth has analysed the capital accumulation. Capital stock takes place with the increase in savings which

in turn depend upon the rate of interest and level of income. In the neo-classical model, investment is a source of demand for loanable funds. The investment is influenced by the marginal productivity of capital. The rate of interest is determining factor of the cost of loanable funds. Lower rate of interest leads to higher rate of investment. There is close relation between growth of population and economic development. Economic development gives much importance to international trade. International trade promotes the techniques of specialization and division of labour which results in better and more efficient allocation of global resources. Technological progress has also been assigned a crucial role in economic growth. To them an increase in the supply of labour leads to fall in money wage and consequently rises employment. There will be full utilization of capital stock and labour which is known as 'golden age'.

3) *The concept of 'Multiplier':* The multiplier effect is like a wave in the river, giving rise to a number of waves, multiplying the money injected into the economy. The amount invested in the economy results in its increase many times over in production and national income. It thus increases more than the basic investment. Out of this increased income, one part will be spent by the workers, producers and money lenders which will lead to increase in the income of other sections of society. The second part of this may be invested by the beneficiaries and this process will go on repeatedly. If this income is spent immediately, the secondary income will rise so rapidly at every round leading to income and employment to the largest extent. The nature of multiplier is determined by the relative amount of saving and consumption to be spent out of the increased national income.

   The concept of 'Propensity to Consume: Propensity to consume means when there is a rise in the income, high marginal propensity to consume is essential in the process of economic development. It also leads to an increase in the effective demand followed by high level of production and employment. But, is an underdeveloped economy these relations among income, consumption and savings do not hold in the same way. When income increases in such economics, the production of consumer goods does not rise due to the lack of capital and other resources. Consequently, prices of commodities accelerate, and not the level of employment.

4) *Karl Marx's contribution to economic philosophy* is as follows.

   a) His contribution to economic development starts with the materialistic interpretation of history, where he tried to explain the influence of economic conditions on the society. He strongly believes that economic condition determines the structure of the society. To him all historical events are the outcome of struggle between two classes viz. capitalists and labour class.

   b) The main reason for the class struggle is the greediness of the capitalists for profit maximization; the greedy capitalists will introduce machines which removes labour from production process. At the same time, the labour class also try to demand higher wages to improve their standard of living which lead to the class struggle. Hence, the conflict between these two groups will dethrone the already existing system i.e. capitalism and invites a new social order viz. socialism.

c) Surplus value theory of Marx tried to explain how the capitalists will exploit the labour class. Instead of paying the wages which are equal to total working hours, the capitalists will pay less than that by taking away the labour surplus. But, when time pass on; to get more profits, the capitalists will change the organic composition of the Capital (C/V), which leads to the introduction of machines in the production process. As a consequence he has to lose the main source of benefits i.e. foregoing the labour surplus.

d) His concept of industrial reserve army vehemently explains the law of increasing misery of masses under capitalism, where he tried to explain how the capital accumulation dethrones millions of people on the streets.

e) The consequences resulting from introduction of machine are: i) falling rate of profits, ii) disproportionality among the various lines of manufacture, and iii) under consumption. Because of fall in rate of profits on one hand and glut in the market in the economy on the other, the capitalists have to search for the new markets in the colonies. The ultimate result is the clash/war between the colonial people and colonial powers, which leads to the world wars.

5) *Critical evaluation of the Dependency Theory:* The dependency theory tries to explain centre-periphery relationship in economic development of underdeveloped countries (periphery) and provides explanatory nature by focusing on the historical causes of their under-development and on how internal socio-economic and political structures of under–developed countries are influenced by external forces of developed countries and the extent to which they are responsible for 'development of underdevelopment' among the underdeveloped countries. Though the theory has its own advantages, it fails to explain the external forces generated as a result of capitalisation which leads to development of periphery countries. The theory saw the centre-periphery relations only in terms of trade and ignored the effects of production process in periphery countries. Another major drawback is in its failure to explain the relationship between the centre and periphery of the market forces. Empirically too, this theory fails to provide data and its only analysis is the experience of Latin American Countries. The theory fails to define the word "dependence" clearly. So, the concept of dependence applied to less developed countries (LDCs) is difficult to define and cannot be related to a continuance of underdevelopment. Nevertheless, it throws light on how internal socio, economic and political structures of under-developed countries are influenced by external forces of developed countries and the extent to which they are responsible for underdevelopment of the under-developed countries.

6) *Impact of liberalism*: The fundamental elements of *contemporary society* have liberal roots. The early waves of liberalism popularized *economic individualism* while expanding *constitutional* government and *parliamentary* authority. One of the greatest liberal triumphs involved replacing the capricious nature of *royalist* and *absolutist* rule with a decision-making process encoded in written law. Liberals sought and established a constitutional order that prized important individual freedoms, such as the *freedom of speech* and of *association,* an *independent judiciary* and *public trial by jury,* and the abolition of aristocratic privileges.

These sweeping changes in political authority marked the modern transition from absolutism to constitutional rule. The expansion and promotion of free markets was another major liberal achievement. Before they could establish markets, however, liberals had to destroy the old economic structures of the world. In that vein, liberals ended mercantilist policies, royal monopolies, and various other restraints on economic activities. They also sought to abolish internal barriers to trade – eliminating *guilds, local tariffs*, and prohibitions on the sale of land along the way.

Later waves of liberal thought and struggle were strongly influenced by the need to expand *civil rights*. In the 1960s and 1970s, the cause of Second Wave feminism in the United States was advanced in large part by *liberal feminist* organizations such as National Organization for Women. In addition to supporting gender equality, liberals also have advocated for *racial equality* in their drive to promote civil rights, and a global civil rights movement in the 20th century achieved several objectives towards both goals. Among the various regional and national movements, the civil rights movement in the United States during the 1960s strongly highlighted the liberal crusade for equal rights.

Another major liberal accomplishment includes the rise of liberal internationalism, which has been credited with the establishment of global organizations such as the League of Nations and, after the Second World War, the United Nations. The idea of exporting liberalism worldwide and constructing a harmonious and liberal internationalist order has dominated the thinking of liberals since the 18th century. But, resistance to liberal internationalism was deep and bitter, with critics arguing that growing global interdependency would result in the loss of national sovereignty and that democracies represented a corrupt order incapable of either domestic or global governance.

Other scholars have praised the influence of liberal internationalism, claiming that the rise of globalization "constitutes a triumph of the liberal vision that first appeared in the eighteenth century" while also writing that liberalism is "the only comprehensive and hopeful vision of world affairs". The gains of liberalism have been significant. In 1975, roughly 40 countries around the world were characterized as liberal democracies, but that number had increased to more than 80 as of 2008. Most of the *world's richest* and *most powerful* nations are liberal democracies with extensive *social welfare programs.*

7) *Gandhi's ideas of Economic Development:* The Mahatma Gandhi's economic ideas are as follows:

   i) He believed that the centralisation could not continue without adequate force. He opined that a mechanised economy was based on violence and he did not approve the state-controlled economy. Therefore, he advocated a decentralized economy.

   ii) In using machines in production process, he did not want the replacement of hand labour by power-driven machines. He welcomed tools and implements which helped workers. And he strongly advocated for the development of small and cottage industries.

iii) He attributes the exploitation of villages to lack of supplementary occupation, inadequacy of medical attention, insanitary conditions, extreme poverty, etc. Hence, he wanted to develop village Swaraj.

iv) He proposed the 'Charka' as a major means to solve the problems of India's poverty, unemployment and to increase national income.

v) He advocated the *doctrine of trusteeship* which aims that all social property should be held in trust. Such a trusteeship will establish welfare of workers and will avoid the clash between workers and capitalists.

vi) He fought for economic equality by opposing child-labour and ill-treatment of labour. He also demanded the safety measures inside the factories.

vii) He recognised the food-shortage in the country and suggested population control measure through self-control.

viii) He advocated Swadeshi spirit through which every Indian Village is a self-supporting and self-contained unit exchanging necessary commodities.

ix) In order to provide justice to all, he advocated 'Sarvodaya'. In this scheme of Sarvodaya, individual has equal opportunities for satisfaction of economic wants. The Sarvodaya plan comprising economic self-sufficiency, decentralisation of power, regionalisation of industries, development of cottage industries, minimisation of the use of machinery and nationalisation of big institutions and public utility services which will be fully implemented with the fullest possible with the cooperation and support of people.

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UNIT 8 DEVELOPMENTAL DISPARITIES: MARGINALISATION

Structure

8.0 Introduction

8.1 Objectives

8.2 Approaches to Study of Indicators of Development: Means of **Knowing** Disparities

- 8.2.1 UNRISD Approach
- 8.2.2 Adelman and Morris Approach
- 8.2.3 Physical Quality of Life Index (PQLI)
- 8.2.4 Human Development Index

8.3 Developmental Disparities: Concept and Significance

- 8.3.1 Concept of Disparity
- 8.3.2 Significance of Disparities: Marginalisation of the Deprived

8.4 Types of Disparities

- 8.4.1 Global Disparities: Inter-regional and Inter-Country Disparities
- 8.4.2 Disparities in India
  - 8.4.2.1 Inter-state Disparities
  - 8.4.2.2 Rural-urban Disparities
  - 8.4.2.3 Inter-religious Disparities

8.5 Causes of Disparity

- 8.5.1 Failures of Economic Growth
- 8.5.2 Inequalities in Land Ownership
- 8.5.3 Private Ownership of Industries, Trade and Buildings
- 8.5.4 Inequalities in Professional Training
- 8.5.5 Rapid Price Rise and Adverse Terms of Trade
- 8.5.6 Poor Availability of Credit Facilities
- 8.5.7 Urban Bias in Private Investment
- 8.5.8 Role of the Government
- 8.5.9 Conflicts and Displaced Persons

8.6 Strategy and Measures to Overcome Disparities in Developing **Countries**

- 8.6.1 Strategy for Attacking Poverty in Developing Countries
- 8.6.2 Measures to Reduce Inequalities/Disparities in Developing Countries
  - 8.6.2.1 Rising Productivity of Small-scale Agriculture
  - 8.6.2.2 Land Reforms and Redistribution of Land
  - 8.6.2.3 Programmes for Increasing Employment Opportunities
  - 8.6.2.4 Strengthening and Enhancing Production of Small-scale **and Informal** Sectors
  - 8.6.2.5 Emphasising Labour-intensive Industrialisation
  - 8.6.2.6 Programmes for Upliftment of the Rural Poor
  - 8.6.2.7 Progressive Tax Policy
  - 8.6.2.8 Sustained Investment in People to Enhance Human Capabilities
  - 8.6.2.9 Subsidising Goods and Services
  - 8.6.2.10 Providing Infrastructure
  - 8.6.2.11 Social Security System

8.6.2.12 People's Participation in Development
8.6.2.13 Promoting Accountability

8.7 Measures Undertaken for Reducing Disparities in India
8.7.1 Measures to Overcome Inter-state Disparity
8.7.2 Measures to Overcome Rural-Urban Disparity
8.7.3 Measures to Overcome Inter-caste/Community Disparity
8.7.4 Measures to Overcome Gender Disparity
8.7.5 Major Comprehensive Drive to Reduce Disparities: Inclusive Growth
8.7.5.1 Inclusive Development: Role of Extension Education in Reducing Disparities

8.8 Let Us Sum Up
8.9 Answers to 'Check Your Progress' Questions
8.10 References

8.0 INTRODUCTION

You may recall that in Unit-4 of Block-1 of this course we have discussed the concept of development as well as the dimensions, factors and indicators of development, among other things. You may revisit Unit-4 for refreshing your memory which will be useful to you in better understanding of the developmental disparities we will be discussing in the present unit.

We know that the standard of living of some people is higher with their greater access to many facilities while many others are at relatively lower levels and do not have adequate access to the required facilities. Further, some others are below poverty line and do not have access to even the minimum basic resources and facilities. It is difficult for us to understand all these differences or disparities among the people if we do not know the indicators of development or disparities in it. We need to understand different aspects of developmental disparities and the significance of eliminating or reducing such disparities in the context of overall development or national development.

In Unit 8, we will be discussing different aspects of developmental disparities. We will highlight the concept, types, measures/indicators and causes of disparities including those leading to marginalization. We will also touch upon important measures required for eliminating or reducing these disparities and for inclusion of the marginalsied into mainstream of development. In this context, we will also touch upon the role that extension education can play in promoting such inclusive development.

8.1 OBJECTIVES

After going through this unit, you should be able to:

- Explain the concept of disparities in the light of various approaches to the study of indicators of development;
- Describe various types of disparities and their relevance in the context of development;
- Discuss the causes of different disparities and analyse the effect of disparities on marginalization;

- Appreciate the significance of the measures required as well as undertaken to overcome them; and
- Explain the role of extension education in promoting inclusive growth.

8.2 APPROACHES TO STUDY OF INDICATORS OF DEVELOPMENT: MEANS OF KNOWING DISPARITIES

As you may recall, we have discussed in Unit 4 broad categories or types indicators of development including the problems associated with each type. In respect of using per capita GNP as a measure of development, the major objections are about its failure to include non-marketed (and therefore non-priced) subsistence production such as house-hold or house-makers' work and to incorporate welfare and income distribution considerations. As a result, there have been numerous efforts both to remedy its defects as a measure and to create other composite measure/indicator that could serve as compliment or alternative to this traditional measure. Basically, such indicators fall into two categories:

i) indicators that seek to measure development in terms of interaction among social, economic and political factors, and

ii) indicators that measure development in terms of quality of life.

We will have a brief overview of these indicators that serve as means to understand the disparities including marginalization.

8.2.1 UNRISD Approach

One of the major studies relating to the first category of indicators i.e. indicators that seek to measure development in terms of interaction among social, economic and political factors, was carried out by the United Nations Research Institute on Social Development (UNRISD) in 1970 (Mentioned in Ray, 1996). The study was concerned with the selection of the most appropriate indicators of development on the basis of an analysis of the relationship between these indicators at different levels of development. The result of the study was the construction of a composite social development index. Out of 73 indicators examined only 16 core indicators (9 social and 7 economic indicators) were selected for this index. The list of these 16 core indicators of socio-economic development is given below.

Table 8.1: UNRISD List of Core Indicators of Socio-economic Development

Sl. No.	Core Indicator
1.	Expectation of life at birth.
2.	Percentage of population in localities of 20,000 and over.
3.	Consumption of animal proteins per capita per day.
4.	Combined primary and secondary enrolment.
5.	Vocational enrolment ratio.
6.	Average number of persons per room.

7.	Newspaper circulation per 1000 population.
8.	Percentage of economically active population with electricity, gas, water, etc.
9	Agricultural production per male agricultural worker.
10.	Percentage of adult male labour in agriculture.
11.	Electricity consumption, Kw per capita.
12.	Steel consumption, Kg per capita.
13.	Energy consumption — Kg of coal equivalent per capita.
14.	Percentage GDP derived from manufacturing.
15.	Foreign trade per capita in US dollars.
16.	Percentage of the salaried and wage earners to total economically active population.

8.2.2 Adelman and Morris Approach

Another study that sought to measure development in terms of interaction among social, economic and political factors was made by Adleman and Morris (1967, mentioned in Supe, 1987). This study classifies 74 developing countries based on 40 variables. These variables include the following.

Table 8.2: Social, Political and Economic Variables – Adelman and Morris

Sl.No.	Variable
1.	Size of the traditional agricultural sector.
2.	Extent of dualism.
3.	Extent of urbanization.
4.	Character of basic social organization.
5.	Importance of indigenous middle class.
6.	Extent of social mobility.
7.	Extent of literacy.
8.	Extent of mass communication.
9.	Degree of cultural and ethnic homogeneity.
10.	Degree of social tension.
11	Crude fertility rate.
12.	Degree of modernization of outlook.
13.	Degree of national integration and sense of national unity.
14.	Extent of centralization of political power.
15.	Strength of democratic institutions.
16.	Degree of freedom of political opposition and press.
17.	Degree of competitiveness of political parties.
18	Predominant basis of the political party system.

19.	Strength of the labour movement.
20.	Political strength of the traditional elite.
21.	Political strength of the military.
22.	Degree of administrative efficiency.
23.	Extent of leadership commitment to economic development.
24.	Extent of political stability.
25.	Per capita GNP in 1961.
26.	Rate of growth of real per capita GNP: 1950-51 – 1963-64.
27.	Abundance of natural resources.
28.	Gross investment rate.
29.	Level of modernisation of industry.
30.	Change in degree of industrialisation since 1950.
31.	Character of agricultural organization.
32.	Level of modernization of techniques in agriculture.
33.	Degree of improvement in agricultural productivity since 1950.
34.	Level of adequacy of physical overhead capital.
35.	Degree of improvement in physical overhead capital since 1950.
36.	Level of effectiveness of the tax system.
37.	Degree of improvement in the tax system since 1950.
38.	Degree of improvement in human resources.
39.	Level of effectiveness of financial institutions.
40.	Structure of foreign trade.

Source: Irma Adelman and Cynthia Taft Morris. 1967. *Society, Politics and Economic Development.* Baltimore: John Hopkins University Press.

The above variables are based on factor analysis. This technique was used for examining the interdependence between social and political variables and the level of economic development. The authors of this study found numerous correlations between certain key variables and economic development.

However, the two approaches discussed above are not free from criticism. The major criticism is that these studies seek to measure development in terms of structural change rather than in terms of human welfare.

8.2.3 Physical Quality of Life Index (PQLI)

To meet the criticisms of two approaches discussed above, Morris (Mentioned in University Grants Commission, 1988) has developed another criterion known as Physical Quality of Life Index (PQLI). Three indicators viz. life expectancy, infant-mortality and literacy have been used to form a simple composite index. For each indicator, the performance of individual country is rated on a scale of 1 to 100, where 1 represents the "worst" performance and 100 as the "best" performance for a country. For life expectancy, the upper limit of 100 was assigned

to 77 years (achieved in Sweden in 1973) and lower limit of 50 was assigned to 28 years (the life expectancy of Guinea Bissau in 1950). Within these limits, each country's life expectancy falling between these limits of 77 and 28 is assigned the rating of 50. For infant mortality, the upper limit was set at 9 per 1000 (achieved by Sweden in 1973) and lower limit at 229 per 1000 (achieved by Taiwan, 1950). Literacy rates measured as percentages from 1 to 100 provide their own direct scale. Once country's performance in life expectancy, infant mortality and literacy have been rated on the scale of 1 to 100, the composite index (PQLI) for the country is calculated by averaging the three ratings, giving equal weightage to each of them.

Demerits: The major weakness of PQLI is that it fails to incorporate other social and psychological factors like security, justice, human rights, etc. A more serious criticism of this measure is that it assigns equal weight to each of the indicators used in forming the index while measures such as life expectancy and infant mortality do not reflect the similar phenomena.

8.2.4 Human Development Index

The economic measures of development have often been supplemented by non-economic social indicators like gains in literacy, schooling, health conditions and services, etc. In this regard the notable and latest attempt to analyse the comparative socio-economic development has been undertaken by United Nations Development Programme (UNDP) in its annual series of Human Development Reports. These reports which were initiated in 1990 have focused on the construction and refinement of Human Development Index (HDI). HDI ranks all the countries within the range of "0" (lowest HDI) and "1" (highest HDI) and is based on three goals of development: i) Longevity, measured by life expectancy at birth, ii) Knowledge, measured by adult literacy (two-third) and schooling (one-third), and iii) Standard of living, measured by real per capita income.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

1) What are the approaches to the study of indicators of development that serve as means to understand the developmental disparities?

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8.3 DEVELOPMENTAL DISPARITIES: CONCEPT AND SIGNIFICANCE

Different approaches to the study of the indicators of development discussed above will help us in understanding the broad nature of disparities in development. Let us look at these disparities below.

8.3.1 Concept of Disparity

Disparity means the condition or fact of being unequal, as in age, rank, or degree (http://www.thefreedictionary.com/disparity). For instance:

- Age disparity – being young, middle-aged, old, etc.
- Rank disparity – being a chaprasi, clerk, an officer, etc.
- Degree of disparity — being poor, average, excellent (as in the condition of a car), or developed, developing, underdeveloped (as in the status of development of a country), etc.

Similarly, it is not justifiable to evaluate the performance of different caders in an organization, with the same yardstick, as their levels of understanding, their levels of intelligence, their knowledge base, the nature of their work, etc., differ from each other. An officer's performance would be judged on the basis of certain yardsticks which would be different from those of a clerk, or a chaprasi. Countries may be new and old, but they are at different levels of development. Some countries like the U.S.A., Norway, and Sweden are at a much higher stage of development compared to countries such as Bangladesh, Nepal or some African countries. Comparisons between such countries may not be justifiable. So, if disparity between the status of various countries exist, they cannot be compared in terms of their levels of development (http://www.egyankosh.ac.in/ bitstream/ 123456789/34921/1/Unit1.pdf).

Disparity and development are like two sides of a coin. Disparity in development creates bottlenecks to further development. The less the disparity, the greater will be the chances of development; and, the greater the disparity, the less will be the chances that development takes place. Countries such as the U.S.A., Norway, and Sweden have fewer disparities in terms of per capita income, per capita consumption and the availability of resources for the rich and the poor, compared to the countries like India, Bangladesh, and Nepal, where disparities are higher between the rich and the poor (Ibid).

8.3.2 Significance of Disparities: Marginalisation of the Deprived

Rapid and sustained economic growth is a modern phenomenon. This 'phenomenon' made its appearance in the eighteenth century with the advent of the industrial revolution in England. Broadly, there are *three aspects* of the process of modern international growth:

i) Economic growth has remained confined to small portion of the world population;

ii) The gap between the developed and underdeveloped countries has increased over the years; and

iii) There is wide spread poverty of disparity among the underdeveloped countries as well.

Modern economic growth has remained confined to a limited part of the world and a large number of the third world countries even now find themselves caught in what economists call 'low level of equilibrium trap'. Though this concrete fact throws considerable light on existing economic disparities, yet it fails to prove the hypothesis that international inequalities have increased over time. To answer the question whether the differentials in per capita income have increased over the last century or not, one requires estimates of per capita product for most countries in the world. Such data are available only for some developed countries. In case of other presently developed countries in the world, such data are available only for some of these counties. For the remaining developed counties, estimates of per capita product are available for too short a period. In respect of most underdeveloped counties data are not at all adequate for making any generalization for the whole underdeveloped world. They, however, suggest that per capita income was either constant or recorded only marginal increase. Surendra J. Patel who has attempted to analyse increasing economic disparities, clearly points out the problems one faces in such an exercise due to paucity of data. Conscious of the limitations of the data he himself feels that his own conclusions are at best tentative. According to the estimates of Patel, around 1850, the average per capita income in the presently developed countries was roughly 70 per cent higher than in the less developed counties which could be characterised as pre-industrial (Ministry of Health and Family Welfare, 2007). By 2004, however, the income disparities between nations had come to such level that the developed countries had grown to a level of 63 times as high as that of the low income underdeveloped economies. The problem is perhaps much more serious than what is revealed from these average levels of per capita incomes; since in some of the richest countries the levels are as high as eighty times of those in the poorest countries. Income disparities measured in terms of purchasing power parity (PPP) are also quite large.

There is some more evidence to indicate the great disparities that existed between the developed and underdeveloped nations in 2004. According to data provided by the World Bank, the developed countries having 15.8 per cent of the world population had accounted for about 80.0 per cent of the world output in the year 2004. Underdeveloped countries in contrast, had 84.2 per cent of the world population but their gross output was only about 20.0 per cent of the gross world output. Whatever information that is available for the recent decades leads us to the conclusion that economic gaps between the rich and the poor nations have steadily increased and in the near future there is no hope that they will be reduced. Thus, the composition of output in developed and underdeveloped countries is substantially different as brought out by the fact that the relatively backward third world countries (the so-called low income economies) account for a mere 3.1 per cent of the world's industrial output. This single fact eloquently reveals the gap that now exists between developed and underdeveloped countries. Further, in spite of the fact that the primary occupation in underdeveloped countries is agriculture, their position in terms of agricultural production is not at all very comfortable. They presently account for about half of the world agricultural production. This sorry state of affairs is particularly due to the persistence of outmoded techniques of production in this sector of their economies. In terms of capital stock and rate of capital accumulation wide disparities exist at the

international level. Underdeveloped countries presently account for less than one-sixth of the world capital stock; since their rate of capital accumulation is also lower than that in developed countries, the disparity between them and the industrialized countries is going to increase over the years, both in absolute and relative terms.

If the disparities between the countries widen beyond proportion, the deprived will get pushed to the margins of developmental process as their participation in the process of development becomes minimal or insignificant and thus get only fringe benefits of the overall development processes. Such phenomenon is true not only in the case of countries as a whole, but also in the case of communities, groups and the individuals in these countries.

With the above understanding of the concept and significance of disparities we will now focus on different types of disparities.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

2) Briefly explain the concept and significance of disparities.

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8.4 TYPES OF DISPARITIES

Broadly speaking, we can identify the following main types of disparities.

i) Global disparities – Inter-regional and inter-country disparities

ii) National disparities or Disparities in India

- Inter-state and intra-state disparities
- Rural-urban disparities
- Religious and caste disparities
- Gender disparities.

The gender disparities, of course, cut across all the other types of disparities, and hence, here it is not discussed as a separate sub-section.

8.4.1 Global Disparities: Inter-regional and Inter-country Disparities

Each country is at a different level of development, thus exist disparities among the countries. Global disparity describes the disparities that exist between and among the nations. For example, socio-economic disparity exists at the global level, and that is why countries are classified into two categories: developed and underdeveloped. There are countries which are in between these two categories which are referred to as developing countries. Some counties have been endowed with abundant resources, while there are countries that are extremely poor in resources. Resources are of various types: material resources, manpower resources, natural resources, and financial resources. Differences in the availability and utilization of these resources, by and large, cause disparity among the countries, and put them at different levels of development (http://www.egyankosh.ac.in/ bitstream/123456789/34921/1/ Unit1.pdf).

Table 8.3 shows the level of global socio-economic disparity that exists between different categories of countries in terms of key parameters such as the per capita income, life expectancy and adult literacy levels.

Table 8.3: Socio-economic indicators of low, middle and high income categories of countries

Category of countries	Socio-economic Indicators Reflecting Global Disparity			
	Gross Domestic Product per Capita in US $ (2006)	Life Expectancy at birth in years (2006)		Adult Literacy Percentage, 15 years and above (2006)
		Male	Female	
i) Low Income	510	56	59	61
ii) Middle income	3764	67	71	83
• Lower income	1658	63	67	71
• Upper income	5884	70	75	93
iii) High income	38658	77	83	98

Sources: *Human Development Report, UNDP. 2008* and *State of the World Children,* UNICEF 2008.

It is quite evident from Table 8.3 that the global disparities exist in different categories or groups in respect of important indicators. If we observe the per capita income, we find that there is lot of disparity among the various groups which accounts to $510 for low income economies, $3,764 for middle income economies, $1,658 for lower middle economies, $5,884 for upper middle economies whereas it was $38,658 in the case of high income economies. The disparity in the life expectancy at birth in case of both males and females is more than 20 years between low income economies and high income economies. There is a marked difference in adult literacy rate which was 61 per cent for low income economies where as it was 98 per cent in the case of high income economies.

Table 8.4 shows the level of global socio-economic disparity that exists between a group of developed countries and a group of underdeveloped/developing countries in terms of key parameters such as per capita income, human poverty index, life expectancy, infant mortality and adult literacy.

Table 8.4: Socio-economic Indicators of a Few Countries – Two Groups

Countries	Socio-economic Indicators Reflecting Global Disparity (2006)				
	Gross Domestic Product Per Capita in US $ (2006)	Human Poverty Index (2006)	Life Expectancy at birth in years (2006)	Infant Mortality Rate (2006)	Adult Literacy Percentage, 15 years and above (2006)
Group A					
Bangladesh	1,155	36.9	63.5	52	52.5
India	2,489	28.5	64.1	57	65.2
Nepal	999	33.3	63.0	46	55.2
Pakistan	2,361	33.6	64.9	78	54.2
Sri Lanka	3,896	16.9	71.9	11	90.8
Group B					
Japan	31,951	-	82.4	3	-
Norway	51,862	-	79.9	3	-
Sweden	34,059	-	80.7	3	-
UK	32,654	-	79.2	5	-
USA	43,968	-	78.0	6	-

Sources: *Human Development Report 2008 (UNDP. 2008), & State of the World Children 2009* (UNICEF, 2008). (See http://www.egyankosh.ac.in/ bitstream/123456789/34921/ 1/Unit1.pdf).

From Table 8.5 also we can notice the global disparities, which are in respect of some selected demographic, social and economic indicators.

Table 8.5: Some Selected Demographic, Social and Economic Indicators

World and regional data	Total population (millions) (2010)	Projected population (millions) (2050)	Ave. pop. growth rate (%) (2005-2010)	% urban (2010)	Urban growth rate (2005-2010)	Total fertility rate (2010)	% births with skilled attendants	Under-5 mortality M/F estimates (2005-2010)
World Total	**6,908.7**	**9,150.0**	**1.2**	**50**	**1.9**	**2.52**	**66**	**71 / 71**
More developed regions	1,237.2	1,275.2	0.3	75	0.7	1.65	99	8 / 7
Less developed regions	*5,671.5*	*7,946.0*	*1.4*	*45*	*2.4*	*2.67*	*62*	*78 / 78*
Least developed countries	*854.7*	*1,672.4*	*2.3*	*29*	*4.0*	*4.23*	*38*	*138 / 126*
Africa	1,033.0	1,998.5	2.3	40	3.4	4.45	49	142 / 130
Arab States	359.4	598.2	2.1	56	2.5	3.20	73	58 / 51
Asia	4,166.7	5,231.5	1.1	42	2.3	2.30	65	56 / 61
Europe	732.8	691.0	0.1	73	0.4	1.52	99	10 / 10
Latin America & Caribbean	588.6	729.2	1.1	80	1.6	2.17	90	31 / 24
Northern America	351.7	448.5	1.0	82	1.3	2.02	99	7 / 7
Oceania	35.8	51.3	1.3	70	1.3	2.42	77	31 / 30

Source: UNFPA. *State of World Population 2010*, p.105, See http://www.unfpa.org/swp/2010/web/en/pdf/ ENSOWP10_DemSocialEcon.pdf.

Expected pace of global advancement warrants equitable development, which in turn requires elimination or optimal reduction of disparities among the nations. Disparities combine both economic and socio-political aspects and are linked to the lack of resources and institutional weaknesses. In inequality analysis one should keep in mind that economic disparity is the mother of all other disparities. The institutional and management aspects are products of initial economic disparity, subsequently instigated many-fold by the lack of strong democratic governance. The remedial measures therefore logically should involve both economic and governance initiatives simultaneously. Under the current disparity context, both in the global and the national arenas, good governance initiatives should encompass economic aspects and vice versa (Zahurul Alam, 2011, See http://www.thedailystar.net/newDesign/news-details.php?nid=190096).

The consequential socio-political and socio-economic disparities foster marginalisation of population, countries, economies and societies leading to their increased vulnerability and insecurity. The resources allocated for improving their security are misused, resulting in greater vulnerability and insecurity of those and additional segments of the global population (Ibid).

The global disparities expressed in terms of income inequalities among the countries continue to show upward slope. The Human Development Report 2005 of UNDP found only 9 countries accounting for 4% of the world's population with reduced gap; the reverse was true for 80% of the world's population. The richest 50 individuals in the world had in 2005 a combined income greater than that of the poorest 416 million. The poorest 40% of the world's population currently accounts for only 5% of the global income, while the richest 20% accounts for 75% of it (Ibid)

The 2010 UNHDR shows that the highest per capita GNI recorded in Lichtenstein is 460 times greater than that in Zimbabwe. The average per capita GNI in the Very High Human Development Countries (VHHDC) in 2010 was 27 times more than that in the Least Developed Countries (LDC). Disparities between the two groups of countries in adult literacy rate, life expectancy at birth, HDI values and other related indicators continue to be grossly disproportionate in favour of the former (Ibid).

Eleven developed countries recorded an average per capita GNI of more than $40,000 in 2010. The figure is less than $4,000 for 62 developing countries, while for 15 of them it is less than $1,000. The average per capita GNI in the very high human development countries exceeds that in the LDCs by 26.72 times. Currently, of the 6.3 billion people of the world, almost 1.4 billion earn less than $1.25 per day, while 3 billion live on a daily income of less than $2.5 a day. More than 80% of the world's population lives on less than $10 a day. These are the people living in the developing countries. On the other hand, in 11 highest per capita GNI countries per capita daily income ranges between $110 and $222. The difference is enormous — 100 to 200 times! In India, 42% of the population earn less than $1.25 per day, while in Bangladesh the figure is more than 51 million (32% of the population). In Tanzania, Liberia and Burundi, 88.5, 83.7 and 81.3% of the people earn less than $1.25 per day (Ibid).

Ill-effects of colonialism and subsequent lack of good governance in the developing countries have contributed to reduced capacity, participation and

opportunities of the people to utilise available resources in a manner that would ensure required pace of development. Emergence of authoritarian regimes following the retreat of direct colonialism has prevented people's participation in the decision-making and development process, which has prompted widespread corruption and accumulation of resources in the hands of small sections of the privileged power capturers. Lion's share of the national wealth thus remained unutilised or under-utilised, leading to increased income inequality in countries where 80% of the world's population lives. Income disparity has increased poverty, harmed democratic governance and human rights, and has prompted internal conflicts and socio-economic and political disorder in most developing countries, leaving those vulnerable to political, social and environmental impediments (Ibid).

Global priorities in spending show, at a glance, the existing disparities between the rich and the poor and the developed and developing economies. At the end of the last century, spending in cosmetics in the US amounted to $8 billion, compared to $6 billion in basic education in the developing countries. The Europeans spent $166 billion for buying ice-cream, cigarettes and alcoholic drinks against $9 billion by the people of the developing countries for water and sanitation for all. In the US and Europe spending in perfumes and pet foods amounted in 1998 to $29 billion compared to $12 billion in the developing countries in reproductive health for all women. Businessmen in Japan alone invested $35 billion for business entertainment (Ibid).

In developed countries, the world military spending and that in narcotics drugs amounted to $400 billion and $780 billion respectively, while the developing countries could spend only $13 billion on basic health and nutrition. While reduction of the world's military expenditure alone by only 1% could ensure primary education to all children in all countries, the lack of intention to do that by the respective countries and regimes, invariably by the developed countries, has compelled nearly one-sixth of the world's population to remain illiterate. This has created a huge unskilled labour market in the developing countries, leading to their economic stagnation and socio-political backwardness (Ibid).

The disparity is not only between nations. Distressing inequality prevails between the rich and the poor within the majority of the countries. In countries where more than 90% of the people earn less than $2 a day, there are evidences of enormous concentration of wealth in the hands of a very limited number of affluent people and families. In Brazil and South Africa, more than 64% of the national wealth is concentrated in the hands of 20% of the population. In some of the poorest countries, such as Kenya, Senegal and Madagascar, where 22.8%, 17% and 49.1%, respectively of the population earn less than a dollar per day, the richest 20% controls over 50% of the national wealth (Ibid).

The current trade regime and globalisation have not impacted positively on the developing economies. Developing countries continue to experience economic hardship and social disadvantages. During the '90s, 54 developing countries experienced negative growth rates. The situation remained unchanged or even became worse despite imposition of more and more tools in international relations. At the end of the last century, the developing countries accounted for less than 22% of the global GDP, although 85% of the world's population lived in those countries. The success stories in some countries remain as isolated incidents that do not reflect the general trend (Ibid).

8.4.2 Disparities in India

In this sub-section, we focus our discussion on the disparities in India.

8.4.2.1 Inter-state Disparities

Like disparities between and among the countries, there exist disparities between and among tthe states within a country and more so in any developing country. Here, we will examine some inter-state disparities in India.

Table 8.6 presents data on 14 States/UTs with seven of them having the percentage of people living below the poverty line which is below that of the national average and States/UTs having it above that of the national average. The first seven States/ UTs have poverty figure of less than 15 per cent and seven other States/UTs with their poverty figures of more than 30 per cent. The table reflects the wide inter-state disparity in poverty ratios.

Table 8.6: Inter-state Disparity in terms of Percentage of People Living below the Poverty Line

Sl. No.	State/UT	Percentage of People below the Poverty Line (2004-05)
I.	**State/UT with less than 15 percentage population below the poverty line**	
1.	Haryana	14.0
2.	Himachal Pradesh	10.0
3.	Jammu and Kashmir	5.4
4.	Mizoram	12.6
5.	Punjab	8.4
6.	Chandigarh	7.1
7.	Daman & Diu	10.5
	All India	**27.5**
II.	**State/UT with percentage of below poverty line population above the national average**	
8.	Bihar	41.4
9.	Chhathisgarh	40.9
10.	Jharkhand	40.3
11.	Madhya Pradesh	38.3
12.	Orissa	46.4
13.	Uttarakhand	39.6
14.	Dadra & Nagar Haveli	33.2

Source: Planning Commission, Government of India (Website: http://www.planningcommission.nic.net) Also see http://www. egyankosh.ac.in/bitstream/ 123456789/34921/1/Unit1.pdf.

Further, from Table 8.7 we can notice vivid inter-state disparities even in terms of the Gross State Domestic Product (GSDP) of different States in India in 2004-05. It indicates wide difference in per capita income of various States and Union Territories. Among them, Bihar has the lowest per capita income of Rs.7,486

whereas it is highest (Rs.80,392) in the case of Goa, followed by Maharashtra (Rs.37,235), Himachal Pradesh (Rs.36,785), Punjab (Rs.36,376) and Haryana (Rs.35,893).

Table 8.7: Per Capita GSDP of States

State	Per Capita GSDP 2004-05 (in Rupees)
Non-Special Category	
Andhra Pradesh	26655
Bihar	7486
Chhattisgarh	20336
Goa	80392
Gujarat	34223
Haryana	35893
Jharkhand	19908
Karnataka	28774
Kerala	32818
Madhya Pradesh	16597
Maharashtra	37235
Orissa	18440
Punjab	36376
Rajasthan	18909
Tamil Nadu	31603
Uttar Pradesh	13842
West Bengal	23145
Special Category States	
Arunachal Pradesh	23326
Assam	18172
Himachal Pradesh	36785
Jammu and Kashmir	22430
Manipur	22457
Meghalaya	24978
Mizoram	27663
Nagaland	22021
Sikkim	28332
Triupura	26693
Uttaranchal (now Uttarakhand)	25276

Source: http://planningcommission.nic.in/plans/planrel/fiveyr/11th/11_v1/11th_vol1.pdf.

Table 8.8: Inter-state Disparity in terms of Percentage of Literates (Census 2001)

Sl.No.	State/UT	Percentage of literates
I.	**State/UT with Literacy Percentage above all India Literacy Rate**	
1.	New Delhi	81.67
2	Goa	82.01
3.	Kerala	90.86
4.	Lakshadweep	86.66
5	Mizoram	88.80
6.	Puducherry	81.24
	All India	**64.84**
II.	**State with Literacy Percentage below all India Literacy Rate**	
7.	Arunachal Pradesh	54.34
8.	Bihar	47.00
9.	Jammu & Kashmir	55.52
10.	Jharkhand	53.56
11.	Rajasthan	60.41
12.	Uttar Pradesh	56.27

Source: Government of India. 2008. *Economic Survey 2007-08.* New Delhi: Ministry of Finance.

Table 8.8 presents data on the literacy rates for 12 states, showing disparities among them — six states with their literacy rates above the national average literacy rate and six states having their literacy rates below the national average literacy rate. It shows that there is acute inter-state disparity in terms of literacy rates, with the first group of six states having literacy rate above national average of 64.84 per cent (ranging from 81.2 per cent to 90.9 per cent) compared to the second group of six states having the literacy rates (ranging from 47.0 per cent to 60.4 per cent), which are below the national average. Such disparities existed in previous censuses as well, but with some changes in the positions of States/UTs constituting such groups above and below the national average.

In order to reduce such disparities the Government of India laid special emphasis on particular group of states having low literacy rates for empowered action to improve the situation. The comparative position of these states in terms of their literacy rates in 2001 and 2011 and the relevant disparities is given in Table 8.9.

Table 8.9: Effective Literacy Trends in Eight Empowered Action Group (EAG) States (2001-2011)

Rank	India/State/ Union Territories	No. of Literates and Literacy Rate in 2011		No. of Literates and Literacy Rate in 2001		Absolute increase in the No. of Literates 2001-2011	Percentage increase in the number of literates and Literacy Rate (2001-2011)	
		Number	Rate	Number	Rate		Number	Rate
	INDIA	**77,84,54,120**	**74.04**	**56,07,53,179**	**64.83**	**21,77,00,941**	**38.82**	**9.2**
1.	Bihar	5,43,90,254	63.82	3,11,09,577	47.00	2,32,80,677	74.8	16.82
2.	Jharkhand	1,87,53,660	67.63	1,17,77,201	53.56	69,76,459	59.24	14.07
3.	Uttar Pradesh	11,84,23,805	69.72	7,57,19,284	56.27	4,27,04,521	56.40	13.45
4.	Rajasthan	3,89,70,500	67.06	2,77,02,010	60.41	1,12,68,490	40.68	6.65
5.	Chhattisgarh	1,55,98,314	71.04	1,11,73,149	64.66	44,25,165	39.6	6.38
6,	Madhya Pradesh	4,38,27,193	70.63	3,15,92,563	63.74	1,22,34,630	38.73	6.89
7.	Uttarakhand	69.97,433	79.63	51,05,782	71.62	18,91,651	37.05	8.01
8.	Orissa	2,71,12,376	73.45	1,98,37,055	63.08	72,75,321	36.68	10.37

Source: http://www.educationforallinindia.com/chapter6-state-of-literacy-2011-census. pdf.

The other States and Union Territories showing substantial percentage increase in number of literates are Dadra and Nagar Haveli (119.46), Daman & Diu (75.63 per cent) Arunachal Pradesh (62.95 per cent), Meghalaya (56.99 per cent) and Jammu & Kashmir (50.71 per cent) (http://www.educationforallinindia.com/ chapter6-state-of-literacy-2011-census.pdf).

Inter-State Variations: One important feature of the growth experienced in the Eleventh Plan, which is relevant for inclusiveness is that high rates of economic growth have been more broadly shared than ever before across the States. While most States have shown sustained high rates of growth, several of the economically weaker States have also demonstrated an improvement in their growth rates. Amongst them are: Bihar, Orissa, Assam, Rajasthan, Chhattisgarh, Madhya Pradesh, Uttarakhand and Uttar Pradesh. According to available data, no State has average GSDP growth of less than 6 per cent during the Eleventh Plan period. While the economically weaker states are catching up in growth rates, there is growing concern about the backwardness of individual districts, several of them located in States that are otherwise doing well. Many of these districts are also affected by Left-wing Extremism. The Backward Regions Grant Fund and various other regional initiatives have been specially designed to address this problem (http://indiamicrofinance.com/wp-content/uploads/2011/09/12th-Plan-India-draft-approach.pdf).

8.4.2.2 Rural-Urban Disparities

Rural-urban disparity has been prevalent in India for ages. Rural areas are considered to be backward areas in terms of availability of basic infrastructure — roads, electricity, water and sanitation facilities, schools and hospitals, etc. In contrast, urban areas are in better position in terms of such facilities. It is because of inadequacy and poor quality of such facilities in rural areas they lag behind urban areas.

In addition, the basic indicators of development such as the level of poverty, illiteracy, unemployment, etc also show us glaring disparities between rural and urban areas. Table 8.10 throws light on some obvious rural-urban disparities in the country.

Table 8.10: Rural-Urban Disparities based on Selected Socio-Economic Indicators

Sl.No.	Indicators	Rural Area	Urban Area
1.	Percentage of People below the poverty line	28.3	25.3
2.	Percentage of literates	53.0	74.0
3.	Percentage of regular wage-employers	7.0	41.0
4.	Average earnings per day in Rs.	48.63	62.64
5.	Percentage of Self-employed	59.5	43.0
6.	Unemployment rates* (Usual status**)	23.0	53.0

*Note:** No. of persons (or person days) unemployed per 1000 persons (or person days)

** Usual status means unemployed on an average in the reference year.

Source: Planning Commission, Government of India. See http://www.planning commission.nic.in.

National Sample Survey Organization, 60th Round (2004-05).

National Sample Survey Organization, 61st Round (2005-06).

Table 8.10 shows that both poverty and illiteracy are higher in rural areas compared to urban areas. The percentage of regular wage employers is also low in rural areas vis-a-vis the urban areas. There is marked difference in terms of the average earnings per day in rural areas as compared to urban areas. It is for this reason that more people in rural areas are self-employed (59.5 per cent in rural areas compared to 43 per cent in urban areas). The higher degree of self-employment also results in low unemployment rates in rural areas (23.0 per cent) compared to those in urban areas (53.0 per cent).

Table 8.11 presents the situation of slums in million plus population cities in India, a situation which is in contrast to rural areas in many respects.

8.11: Total and Slum Population of Million Plus Cities in India — Census 2001

Million Plus Popu. cities	Total Popn. (in '000)	Slum Popn. (in '000)	% of Slum to Total Popn.	Sex Ratio in Non-Slum areas	Sex Ratio in Slum areas
Greater Mumbai	11,978	6,475	54.06	859	770
Delhi M.Corp.	9,879	1,851	18.74	836	780
Kolkata	4,573	1,485	32.48	841	805
Banglore *	4,301	431	10.02	915	947
Chennai *	4,344	820	18.88	953	974
Ahmedabad	3,637	474	13.46	891	850
Hyderabad *	3,520	627	17.23	930	938
Kanpur	2,551	368	14.42	857	857
Pune	2,538	492	19.39	920	928
Surat	2,433	508	20.89	794	701
All India	73,346	17,697	24.13	874	820

* Million Cities of South India

Source: http://www.indiaonlinepages.com/population/slum-population-in-india.html.

8.4.2.3 Inter-religious Disparities

Inter-religious disparities are age-old phenomena. Censuses were conducted in parts of India in the ancient times with examples such as Kautilya's *Arthashastra* which describes the collection of population statistics for taxation in 4th century B. C. The British census in 1865- 1872 was the first conducted in modern times in India. The 2001 census figures released by the Indian Census Commission give a breakdown by various parameters including religion (http://hetv.org/india/index.html).

Table 8.12: Demographic and Socio-economic Disparities in India in 2005: Religion-wise

Parameter	Religion						
	Hindus	**Muslims**	**Christians**	**Sikhs**	**Buddhists**	**Jains**	**Others**
% total of population 2005	80.5	13.4	2.3	1.9	0.8	0.4	0.6
10-Yr Growth % (est '91–'01)	20.3	29.5	22.6	18.2	24.5	26	103.1
Sex ratio* (avg. 944)	935	940	1009	895	955	940	100
Literacy rate (avg. 79.9)	75.5	60.0	90.3	70.4	73.0	95.0	50.0
Work Participation Rate	40.4	31.3	39.7	37.7	40.6	32.9	48.4
Rural sex ratio	944	953	1001	895	958	937	995
Urban sex ratio	922	907	1026	886	944	941	966
Child sex ratio (0–6 yrs)	925	950	964	786	942	870	976

Notes: 1. All figures in %.

2. Gender Ratio*: no of females/1000 males.
3. *Others* including Bahá'ís, Jews, and Parsis.
4. Tribal Animists (and non-religious) are grouped under Others after 1926 (1931 Census onwards).

Source: The First Report on Religion: Census of India 2001

á. The data excludes Mao-Maram, Paomata and Purul sub-divisions of Senapati District of Manipur.

â. The data is "unadjusted" (without excluding Assam and Jammu and Kashmir); 1981 census was not conducted in Assam and 1991 census was not conducted in Jammu and Kashmir. (See http://hetv.org/india/index.html).

It may also be noted specially that about 40% of the Hindus speak Hindi while the rest speak Bengali, Telugu, Marathi, Tamil, Gujarati, Kannada and other languages. Almost 70% of the Muslims speak Urdu while the rest speak Kashmiri, Bengali, Malayalam, Tamil, Gujarati and other languages. About one-third of the Christians speak Malayalam, one-sixth speak Tamil while the rest speak a variety of languages.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

3) What are the broad types of disparity?

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4) Describe in brief the global disparities.

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8.5 CAUSES OF DISPARITY

In this section, we will discuss the causes of various types of disparities. The root causes of disparities can be broadly discussed under the following sub-sections.

8.5.1 Failures of Economic Growth

Failures of economic growth can be attributed to the inability of many countries to reduce inequalities in income distribution which finally results in poverty, hunger, etc. For example, during 1990s growth in annual per capita income in the East Asia and the Pacific region was 6.4 per cent and this region recorded a

14.9 per cent reduction in poverty. South Asia recorded an annual per capita income growth of 3.3 per cent and this was accompanied by 8.4 per cent reduction in poverty. On the other hand, the regions of Central and Eastern Europe and the Commonwealth of Independent States (CIS) faced a decline of 1.9 per cent annum in per capita income and this was accompanied by a 13.5 per cent increase in poverty in the 1990s. In sub-Saharan Africa, per capita income fell by 0.4 per cent per annum in 1990s and this was accompanied by a 1.6 per cent increase in poverty. According to Human Development Report, 2003 (Planning Commission, 2007), at constant inequality levels, a country needs to grow by 3 per cent or more a year to double incomes in a generation – say, from $1 to $2. Yet, out of 155 countries only 30 countries had annual per capita income growth rates of about 3 per cent in the 1990s. Among the rest, 54 countries saw average income fall, and in 71 countries annual income growth was less than 3 per cent. As a result of this dismal growth performance, more than 1.2 billion people are presently struggling to survive on less than $1 a day.

8.5.2 Inequalities in Land Ownership

Land is critical for rural people and for the three-quarter of the world's poor who depend on agriculture for their income or livelihood. About a quarter of the rural people in developing countries are landless or do not have adequate security of tenure or title. Inequalities in land ownership across regions and countries galore. For instance, in Latin America, 1.3 per cent of the large landowners hold 71.6 per cent of the entire area of land under cultivation. In India, top 10 per cent of the rural households possess 56.23 per cent of the agricultural land while the bottom 70 per cent owns only 13.83 per cent land. This concentrated ownership of land is the major cause of poverty and income inequalities in the rural sector. The economic power which the large land owners enjoy has helped them in gaining political ascendancy and they have been successful in diverting the benefits of all rural development efforts initiated by the governments in their favour. Thus, while they have prospered, the rural poor languished. In fact, as noted by the World Development Report, the landless are among the poorest in developing countries (Government of India, 2007).

8.5.3 Private Ownership of Industries, Trade and Buildings

Most of the developing countries are mixed capitalist economies which permit private ownership of industries, trade and buildings. Hence, a microscopic minority has acquired control over vast assets. Industries and business houses easily obtain capital from bank and other financial institutions, besides equity capital which they raise from the market. This is the reason why even in the period of recession their assets continue to increase. Control measures initiated by the governments (like the licensing policy and physical controls) are not only defective but also little attention is paid to their proper implementation. Traders, transporters and urban property owners are the other classes which have taken full benefit of the limited growth that has taken place in these economies. Most of these persons are men of average intelligence, and yet their incomes are very high because they have control over the means of production. In contrast, many intelligent and enterprising persons never get any opportunity in their lifetime and hence live on moderate earnings merely because their only asset is their labour power. Workers employed in the unorganized sectors and the unemployed persons belonging to the lower strata of the society generally constitute the class of the poor in the urban areas.

8.5.4 Inequalities in Professional Training

Incomes of business executives, engineers, physicians, lawyers and other professionals are often high and from this fact the false understanding that income inequalities arise from professional competence or lack of it. On superficial consideration, this may look convincing, but the truth is otherwise. In a class society as it prevails in most of the developing countries, training required for professional competence is not available to all. Only children belonging to elite families have access to higher and professional education. Sons and daughters of agricultural labourers, industrial workers and socially handicapped groups like tribals and Harijans cannot hope to get this education.

8.5.5 Rapid Price Rise and Adverse Terms of Trade

Changes in relative prices and terms of trade affect poverty levels and income inequalities strongly. This phenomenon can be expressed in terms of the entitlements approach of A. K. Sen. Extremes of poverty or famine of many do depend not only on low income levels, but also of their vulnerable position in entitlement system: "the entitlement failures may be due to declines in ownership (for example cattle dying), declines in exchange entitlement, that is the terms at which someone can exchange his commodity bundle for the one he wishes to acquire (for example, food). To understand famines one should therefore concentrate on entitlements rather than aggregate food availability" (Government of India, 2007a). The Bengal famine of 1943, for instance, was caused not just by aggregate food shortage but was also due to war-time inflation with rapid increase in prices. Due to this inflation, the purchasing power of landless workers was eroded by almost two-thirds in a very short span of time. Sen also cites the example of 1972 famine in Ethiopia, where many farmers faced crop failures and cattle death. To be able to buy food they tried to sell parts of their assets like land and cattle. However, since many of them tried to do this at the same time, the prices of the assets fell drastically. Therefore, the ability of farmers to purchase food was very adversely affected. Even today, inflation affects the income of the poor adversely as their real purchasing power declines considerably while money wages increase at a snails's pace or do not increase at all. On the other hand, big industrialists, traders and large farmers (who contribute a major chunk of the marketed surplus of food grains) benefit a great deal from inflation as their incomes increase continuously. As a result, income inequalities between the rich and the poor classes widen considerably. Most of the developing countries are experiencing this phenomenon as heavy doses of deficit financing resorted to by them have created severe inflationary pressures in their economies.

8.5.6 Poor Availability of Credit Facilities

In developing countries, operations of the price system further accentuate the already existing inequalities which arose from unequal distribution of wealth and income. Persons having access to the formal capital markets are able to obtain finance on very favourable terms, whereas persons relying on the informal market have to pay a heavy price for credit. For instance, while medium and large farmers easily obtain loans from banks and cooperatives on account of their creditworthiness, the vast mass of agricultural labourers, and small and marginal farmers continue to depend heavily on the village money-lenders who charge an exorbitant rate of interest and also exploit the poor people in a number of ways. As noted by the Human Development Report 1997, credit and savings

help families through crisis – drought, recession, illness – without having to resort to measures such as selling off their assets or taking children out of school. However, only 2-5 per cent of the 500 million poorest households in the world have access to institutional credit.

8.5.7 Urban Bias in Private Investment

While 70 to 80 per cent of the population of the developing countries lives in rural areas, about 80 per cent of private investment goes to industries in urban areas. Therefore, there is a distinct 'urban bias' in favour of urban areas in the private investment. This urban bias takes the form of highly mechanised projects in which the share of wages in value addition is relatively low (Banerjee and Marjit, 2005). Therefore, as noted by Keith Griffin, "the rate of employment creation in the capital-intensive sector is slow, sometimes not even as fast as the rate of growth of the labour force" (UNICEF, 2009).

8.5.8 Role of the Government

Though the state is often proclaimed as a 'precursor' and 'initiator' of economic change in the developing counties, the fact is that the state investment essentially plays a supportive role in private investment (especially the large and capital-intensive enterprises). This is due to the fact that the state depends for its support on the same social forces which own the wealth of the country and supply the technicians, administrators and the dominant political groups. In such an environment, the governments merely guard the status quo and adopts policies which, on balance, are designed to perpetuate the hegemony of the propertied classes and those allied to them. Even the public housing helps the relatively better of people more than they help the wretched poor belonging to the lowest income groups.

8.5.9 Conflicts and Displaced Persons

Civil wars, guerilla wars, separatist movements and ethnic violence in many developing countries have displaced a number of people from their homes and have also led to many barbaric crimes and deaths of innocent people. In 1995 there were 46 million displaced people – one in every 120 people in the world – who had been forced to flee from home. Of these 46 million displaced persons, as many as 40 million were in developing countries. As noted by HDR 1997, conflict in poor countries block or handicap poverty eradication efforts. Quite apart from the direct impact of widespread destruction, conflicts divert important resources from development.

In addition to those affected by warfare, many poor people fall victim to the supposedly "peaceful" alternatives – economic sanctions. However, it is generally found that while the politically connected and wealthy people are able to avoid much of the impact of such economic sanctions, it is the poor people who suffer most. HDR 1997 gives the examples of Haiti and Iraq in this context. In Haiti, during sanctions, drinking water supplies were cut by half. The price of staple foods increased five-fold and the proportion of malnourished children rose from 5 per cent to 23 per cent. In Iraq, under sanctions, life expectancy fell from 65 years in 1990 to 57 years in 1994.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

5) List out the causes of disparities.

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8.6 STRATEGY AND MEASURES TO OVERCOME DISPARITIES IN DEVELOPING COUNTRIES

Having studied the concept, types and causes of disparities, we need to look at the measures of overcoming or reducing these disparities.

8.6.1 Strategy for Attacking Poverty in Developing Countries

World Development Report 2000/2001 (UNICEF, 2009) proposed a strategy for attacking poverty in three ways:

i) Promoting opportunity;

ii) Facilitating empowerment; and

iii) Enhancing security.

Promoting opportunity implies steps to increase jobs, credit, roads, electricity, schools, water sanitation and health services. Facilitating empowerment requires creation of sound and responsive institutions for the benefit of the poor. Enhancing security implies reducing vulnerability to economic shocks, natural disasters, ill-health, disability and personal violence. This is an intrinsic part of enhancing well-being and encouraging investment in human capital and in higher-risk and higher-return activities.

8.6.2 Measures to Reduce Inequalities/Disparities in Developing Countries

The important measures to implement the above strategy and reduce poverty and income inequalities in the developing countries are as follows (World Development Report 2000/2001 mentioned in UNICEF, 2009).

8.6.2.1 Rising Productivity of Small-scale Agriculture

Around 70 to 80 per cent of poor people in most developing countries depend on agriculture for their livelihoods, either as small-holders or as labourers. Growth in small-holder agricultural productivity was a major factor in poverty reduction in China in 1975-85, in Indonesia and Malaysia in 1970-80 and in Japan, the Republic of Korea and Taiwan in the 1950s and 1960s. This shows that policies to raise the productivity of small-scale agriculture in developing countries can play an instrumental role in alleviating poverty and in reducing income inequalities. Efforts can be made in this direction by providing improved technologies to the farmers, supported adequately by public programmes to make available agricultural inputs at cheaper rates, better social services, improved infrastructural facilities and agricultural research. As noted by the Human Development Report 1997, improving the productivity of small-scale agriculture does more benefit to the farmers. It also creates employment on-the-farm and off and reduces food prices. The poor benefit most because around 70 per cent of their consumption is food, mostly staples; and regular supplies and stable prices create food security for them.

8.6.2.2 Land Reforms and Redistribution of Land

As noted earlier, the basic cause of income inequalities in the rural sector of the developing countries is the extreme inequalities in land ownership. Since a majority of the population lives in rural areas, we can regard inequalities in land ownership as the basic cause of income inequalities in the developing countries. Therefore, extensive land reforms and land redistribution measures can help in reducing income inequalities significantly. This view has been corroborated by some studies as well.

8.6.2.3 Programmes for Increasing Employment Opportunities

The measures adopted for increasing employment opportunities in the developing countries fall under two broad categories:

i) Measures for general employment, and

ii) Measures for specific employment to the trained and skilled personnel.

In the former category, the measures generally include a variety of measures to increase wage employment. In order to increase wage employment, the governments act on two fronts — to raise the volume of investment, and to improve investment-income ratio as far as possible. In the second category, the measures include those aimed at providing assistance for self-employment. These include provision of training to those who wish to set up their own small-scale industries or businesses; provision of financial assistance on easy terms to such persons and supply of raw material at subsidized rates; provision of marketing facilities, etc. As is clear, both types of measures are meant to eliminate unemployment mainly in urban areas. Further, to encourage rural employment in particular, the governments provide credit, marketing facilities and agricultural inputs to the farmers for this purpose. A number of large overpopulated countries

in fact face the problem of disguised unemployment. The governments of these countries have introduced large-scale programmes of industrialization with the hope that they would enable the surplus labour in agriculture to move to the industrial sector.

8.6.2.4 Strengthening and Enhancing Production of Small-scale and Informal Sectors

The developing countries should recognize the valuable contributions of the informal sector to employment and take actions that encourage it to expand. In this approach, improving the productivity and working conditions of small-scale producers and microenterprises will be the key. According to the Human Development Report, 1996 (mentioned in Human Development Report. 2003): "intervention must build on the entrepreneurial vitality of the informal sector to ensure quick results in improving living conditions and employment opportunities. Such interventions should create an enabling environment for informal sector growth through deregulation, assistance to microenterprises and access to raw materials, markets and technology". Ensuring availability of institutional credit at low cost is also necessary as such credit is a critical factor in the success of the small-scale and informal sectors.

8.6.2.5 Emphasising Labour-intensive Industrialisation

Growth strategies on labour-intensive activities such as textiles, clothing, electronics and intensifying small-scale agriculture will enable the developing nations to achieve high growth, full-employment and rising wages. It means emphasizing labour-intensive industrialization is the key to expanding employment opportunities in developing countries.

8.6.2.6 Programmes for Upliftment of the Rural Poor

As a result of the conviction that indirect measures can be effective only marginally in eradicating poverty and reducing income inequalities in the rural sector, many developing countries have attempted a direct assault on poverty. For instance, for the purpose of uplifting the rural poor the Government of India has introduced a number of programmes aimed at creating employment opportunities and helping them. Some of them include: Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labourers Development Agency (MFAL), the National Rural Employment Programme (NREP), Rural Landless Employment Guarantee Programme (RLEGP), the Integrated Rural Development Programme (IRDP), Jawahar Rozgar Yojana (JRY), Swarna Jayanthi Shahari Rozgar Yojana (SJSRY), Prime Minister's Rozgar Yojana (PMRY), National Rural Employment Guarantee Scheme, etc.

8.6.2.7 Progressive Tax Policy

The governments of the developing countries can use tax policy to reduce income inequalities. For instance, a high element of progressivity in the direct taxes can be introduced with the object of taxing the richer sections at a much higher rate than the poorer sections. Two suggestions made in the World Development Report, 2006 for raising tax revenues in developing countries are noteworthy: i) levying of more property taxes as they account for only a small share of taxes in these countries; and ii) levying of inheritance taxes. Justifying the later, the Report says that predetermined circumstances should not affect a person's life chances (heirs have not earned the wealth they have inherited) (World Bank, 2006).

8.6.2.8 Sustained Investment in People to Enhance Human Capabilities

High-employment economies have generally invested in the development of human capabilities particularly education, health and skills. They have also constantly upgraded technical skills to enable workers to adopt to rapidly changing international conditions. However, this requires not only formal education but also skill-training targeted at productivity increase, training workers at the workplace so that they can master the ever-changing technology and continuously enhancing their creative abilities and productivity, and substantially raising expenditure on Research and Development (R & D). Better health and nutrition also contributes to reducing poverty and enhancing productivity. Governments in developing countries are aware of this and many of them are trying to provide health facilities to the poor and to improve their nutritional status.

8.6.2.9 Subsidising Goods and Services

Public Distribution System can be used as an instrument for effecting redistribution of income if it is used to supply essential commodities to the poorer sections only at lower prices while the rest of the population is left to buy them in the open market. This would indeed be a 'partial' distribution system but is advisable on account of the following reasons:

i) It imposes less administrative strains on the already over-burdened bureaucratic system,

ii) It serves the purpose of redistributing income in favour of the poor since its benefits occrue exclusively to them, and

iii) It ensures production incentives to the farmers because only a part of the marketable surplus is procured at lower prices for the public distribution system while the rest of the produce can be sold by the farmers at the market prices set by the high purchasing power of the comparatively richer sections of the population. This would prevent the diversion of resources away from the production of essential commodities under consideration.

8.6.2.10 Providing Infrastructure

World Development Report 2006 (World Bank, 2005) quotes a study by Leipziger and others (2003), based on a sample of 73 countries which found that 10 per cent improvement in a country's infrastructure index is associated with 5 per cent reduction in child mortality, a 3.5 per cent reduction in infant mortality and a 7.8 per cent reduction in maternal mortality. Improving rural transport infrastructure can reduce transaction costs, expand access to markets and improve rural incomes. Investments in basic water and energy infrastructure can improve gender equity. This is due to the reason that around the world, the burden of gathering and transporting fuel wood and water traditionally falls on women and girls.

8.6.2.11 Social Security System

All the measures discussed so far cannot benefit the aged and the infirm in developing countries whose number is constantly increasing. This is partly due to increasing life expectancy in the developing countries and partly due to the weakening of traditional family and community-based social security arrangements (for instance, the break-up of joint family system in India). In most

of the developed countries, coverage of the social security system for such people is almost universal. Benefits are provided to the elderly people, the disabled people, the surviving spouses and the children through the system of social insurance (such as pension) and social assistance (for instance, health facilities). Therefore, policy measures are urgently called for to cover these people. It is necessary to provide preventive and basic health care to all the elderly and the infirm poor and this could be supplemented by cash or in kind transfer when necessary.

8.6.2.12 People's Participation in Development

It is very important that people's participation is ensured at all stages of development, and at all levels — from the top to the grassroots level. When people are participating in the development process, it is in their interest to ensure that all sections of the society benefit equally from the process. If only a small section of the population benefits from the development process, it means that over a period of time disparity would crop up. In villages, where discrimination on the basis of caste, class and gender is extremely pronounced, the Panchayat Raj system can play a major role through people's involvement in the development process.

8.6.2.13 Promoting Accountability

It is also important to ensure that people are made accountable for the non-functioning, mal-functioning of the systems within the government. This can be done if people are involved at every stage of development, right from the stage of planning a programme, to its execution, monitoring and evaluation. It is important for the people to realise that the programmes are meant for people and that they need to involve in their execution and monitoring. The concept of ownership of a programme or a scheme should vest with the people, and only then would they feel concerned and accountable. If a road, for example, is in a bad shape, making life difficult for commuters, it is the people, the road users themselves, who need to be accountable. That is why we have good roads and bad roads in the same city, causing disparity in the availability of services. Good roads are for those road users who are willing to take the onus of accountability and bad roads are for those road users who are not willing to be accountable.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

6) What are the three strategic ways of attacking poverty?

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7) What are the important measures for reducing inequalities/disparities in developing countries?

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8.7 MEASURES UNDERTAKEN FOR REDUCING DISPARITIES IN INDIA

Since independence Government of India has taken several measures to reduce disparities in many respects. Mainly, they are for reduction of inter-state, rural-urban, inter-caste and gender disparities. We discuss them, in brief, below.

8.7.1 Measures to Overcome Inter-state Disparity

Some of the measures undertaken for reduction of the inter-state disparities are as follows.

Programmes for the development of backward areas: Programmes targeting disadvantaged areas, comprising the states of Arunachal Pradesh, Bihar, Himachal Pradesh, Madhya Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Uttar Pradesh, etc., were mainly initiated during the fourth Five Year Plan (1969-74) with a view to counter rising inter-state disparity in development. With the exception of the hill area development programme, identified towards the latter half of the third five year plan, most of the other such programmes were identified during the fourth Plan. The Indo-China war in 1962 made our planners and policy makers sensitive to the development of hill areas in North and North-Eastern India with an eye on national security (http:// www.egyankosh.ac.in/ bitstream/123456789/34921/1/Unit1.pdf).

Industrially backward areas in the country were identified in 1969. Areas characterised as 'structurally impoverished', such as drought-prone areas were identified in 1972. Areas dominantly inhabited by the socially backward tribal communities were identified in 1974 for the Tribal Sub-Plan projects (Ibid).

Table 8.13: Chronology of the Backward Areas Development Programme

Plan	Name of the Programme	Year of Starting
Fourth Plan (1969-74)	Industrially backward areas	1970
	North-East	1972
	Drought-Prone Areas	1973
Fifth Plan (1974-79)	Tribal Areas	1974
	Hill Area Development including the Western Ghats	1974
	Desert Development	1977
Seventh Plan (1985-90)	Border Area Development	1987
Tenth Plan (2002-07)	Rashtriya Sam Vikas Yojana	2002-03
Eleventh Plan (2007-12)	Backward Region Grant Fund	2005-06

Source: http://www.egyankosh.ac.in/bitstream/123456789/34921/1/Unit1.pdf.

The Planning Commission of India implements the area programmes such as the Hill Area Development Programme, including the Western Ghats, the Border Area Development, the North-East and the Desert Development Programmes. Tribal Development Programme is with the Ministry of Tribal Affairs. The Drought Prone Area Programme (DPAP) is the responsibility of the Ministry of Rural Development. The Desert Development Programme is now the dual responsibility of the Planning Commission and Ministry of Rural Development. The Ministry of Industry is assigned the responsibility of the Industrially Backward Area Development Programme. Schemes proposed for an Annual Plan of 11th Plan included the following (http://www.egyankosh.ac.in/bitstream/123456789/34921/1/Unit1.pdf).

i) ***Accelerated Development of Western Ghats:*** The Western Ghats Development Programme (WGDP) targeting the states of Karnataka, Kerala, Maharashtra and Tamil Nadu has got two key components, namely, improving natural resources management and improving the access to tribal hamlets through footbridges. The management of natural resources will be carried out in a participatory mode with the involvement of Village Panchayats and NGOs with appropriate support from Research & Development institutions. The main focus of the WGDP has been the integrated development of watersheds keeping in view the overriding priorities of eco-restoration and eco-preservation. In addition to the projects on natural resource management, the schemes for livelihood support system and productive system management are also included.

ii) ***Special Area Development:*** The objective of the scheme of special area development, comprising the states of Jammu & Kashmir, Himachal Pradesh, Sikkim, Manipur, Meghalaya, Nagaland, Tripura, Arunachal Pradesh and Mizoram, is to develop the coastal regions of the country in an integrated manner. In order to prepare an action plan for the coastal areas, it is necessary to bring the resources and services of the departments like fisheries, harbor, engineering, ports, health, education, and civil society organisations as well

as of local governments together, so that convergence happens. The projects will be implemented with the support of local governments, Government of India, National Coastal Development Centre, financial institutions and state governments.

iii) ***Backward Region Grant Fund (BRGF):*** The Backward Region Grant Fund is a new initiative of the Government of India. It primarily covers the states of Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. The scheme was launched by the Planning Commission in 2005-06 by merging it with the Rashtriya Sam Vikas Yojana, which was initiated in 2002-03 in Mizoram. The scheme is monitored by the state level steering committee chaired by the Vice-Chairman, State Planning Board and at the district level, the District Collectors are coordinating the project.

Programmes for development of the North-Eastern Region: In order to implement programmes for development of the North Eastern region, and to reduce inter-state disparity, a Ministry of Development of North-Eastern Region (DONER) was set up in September 2001, to act as the nodal department of the Central Government to deal with matters pertaining to the socio-economic development of the eight States of North-East, i.e. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and Sikkim.

8.7.2 Measures to Overcome Rural-Urban Disparity

Some of the important measures undertaken by India which are aimed at reducing rural-urban disparities include the following.

- Integrated Rural Development Programme (IRDP) and allied programmes.
- Indira Awaas Yojana (IAY).
- The Swarnjayanti Gram Swarojgar Yojana (SGSY).
- Sampurna Grameen Rozgar Yojana (SGRY).
- National Rural Employment Guarantee Programme (NREGP)/Mahatma Gandhi National Rural Employment Guarantee Programme (MNREGS).

Some other important programmes: In addition to the above programmes, there are many programmes that aim at reducing the disparities. All the central Government sponsored programmes for rural development are of four types:

i) Wage employment programmes like Jawahar Rozgar Yojana (JRY), Employment Guarentee Scheme (EGS), Employment Assurance Scheme (EAS).

ii) Development of Women and Children in Rural Areas (DWACRA), Training of Rural Youth for Self-Employment (TRYSEM), Nehru Rozgar Yojana, Prime Minister's Rozgar Yojana.

iii) Non-employment and/or environment-oriented programmes such as Drought Prone Area Programme (DPAP), Integrated Child Development Scheme (ICDS) and Panchayat Development, Desert Development Programme (DDP), Wastelands Programmes, etc.

iv) Basic Needs programmes like elementary education, adult education, rural water supply, rural sanitation, etc.

All these programmes independently and collectively focus on reducing rural-urban inequalities within and across the states.

8.7.3 Measures to Overcome Inter-caste/community Disparity

Some of the important measures aimed at reducing inter-caste/community disparities are as follows.

i) **Integrated Child Development Services (ICDS):** Initiated in 1975, ICDS is one of the largest child intervention programme in the world with a holistic package for children below six years of age, and for pregnant and nursing mothers. These services are: health checkup, immunization, referral services, supplementary feeding, pre-school education, and health and nutrition through one platform i.e. Anganwadi Centre. Starting with a modest 33 blocks/ projects, it has gradually expanded to 6,118 projects of which 5,659 projects with 7,48,229 Anganwadi Centres were operational by March 31, 2006. ICDS covers 562 lakh beneficiaries consisting of 467 lakh children below 6 years of age and 95 lakh pregnant and lactating mothers. The Rajiv Gandhi National Creche Scheme for children of working mothers was launched on January 1, 2006 and is being implemented by the Central Social Welfare Board and two other national level country organizations, namely Indian Council for Child Welfare and the Bharatiya Adimjati Sevak Sangh.

ii) **Welfare and Development of Backward Classes and other Weaker Sections:** Backward and weaker sections include many groups of population cutting across different castes and efforts to reduce disparities with reference to these sections are briefly as follows.

- ***Scheduled Castes:*** Scheduled Castes constituting 16.23 per cent of the total population of the country (2001 census), suffer on account of severe socio-economic deprivation arising out of poor asset base, dependence on wage labour, subsistence level of farming, engagement in scavenging and unclean occupations and related social evils. By way of special interventions, four schemes are being implemented to encourage SC students for continuing their education from school to higher levels. National level finance and development corporations provide credit facilities to the beneficiaries who are living below double the poverty line. A new scheme of self-employment for Rehabilitation of Scavengers assisted those scavengers who were waiting for rehabilitation and yet to be assisted, in a time-bound manner by March 2009. To abolish the practices of un-touchability and curb the high incidence of crimes and atrocities against SCs, efforts are made for effective implementation of the Protection of Civil Rights (PCR) Act, 1955 and the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989, with the help of 22 Special Courts under the Protection of Civil Rights (PCR) Act, 1955, and also 137 special courts under the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989.

- ***Scheduled Tribes:*** According to the 2001 census, STs accounted for 84.32 million, equivalent to 8.2 per cent of the country's total population. Compared to the rest of the society, STs continue to be socio-economically backward. The focus is on family-oriented income-generating schemes, creation of critical infrastructure, extending financial assistance to SHGs for community-based activities, and development of primitive tribal groups and forest villages. Grant-in-aid under Article 275(1) is also being provided to the states with an objective to promote the welfare of the STs and improve administration in the states to bring them at par with the rest of the states, and to take up such special welfare and development programmes which are otherwise not included in the Plan programmes. Under the flagship scheme of Post-metric Scholarships, all eligible ST students are provided with stipend to pursue their education beyond metric including professional and graduate and post-graduate courses in recognized institutions. A new scheme of Rajiv Gandhi National Fellowship for ST students to pursue higher education was launched during 2005-06 and has been entrusted to UGC for implementation. Economic empowerment of STs continued through extension of financial support to the National Scheduled Tribes and Finance Development Corporation (NSTFDC) and the Tribal Cooperative Marketing Federation of India Limited (TRIFED). Under the scheme of NSTFDC, financial support is being extended to STs beneficiaries/entrepreneurs in the form of term-loans and micro-credit at concessional rate of interest for income generating activities. The TRIFED purchases products from STs, thereby strengthening their economic status.

- ***Minorities:*** Muslims, Christians, Sikhs, Buddhists and Parsis were declared as Minority Communities vide Gazette Notification issued on October 23, 1993 by the Union Government. As per the 2001 census, these five notified minority communities constitute 18.42 per cent of the country's population. The main factor responsible for socio-economic backwardness of the minority communities, particularly the Muslim community, is the lack of access to the common school system. This is particularly true in the case of Muslim girls. In the financial year 2006-07, the corpus of the Maulana Azad Education Foundation which provides financial assistance to implement educational schemes for the benefit of the educationally backward minorities has been enhanced to Rs.200 crore from Rs.100 crore. Some important recommendations relate to measures which should be undertaken for high quality education, specifically for school education of Muslim girls, promoting and enhancing access to Muslims in priority sector advances, imparting training to the minorities for entrepreneurial development, participation of minorities in micro-credit schemes, and introducing Centrally Sponsored Schemes (CSS) and Central Plan Schemes (CPS) for minorities. In addition, provision of basic amenities, good quality government schools and health facilities, pucca approach roads, and general improvement in living conditions (supply of electricity/housing/clean drinking water and sanitation) at all villages/towns/habitations will serve the overall interest of all communities.

- ***Other backward classes (OBCs):*** Government provides central assistance to state governments/UT administration for educational development of Other Backward Classes. For construction of hostels for OBC boys and girls, the state governments/UT administrations/ NGOs have been provided financial assistance. National Backward Classes Finance and Development Corporation extend credit facilities to persons living below double the poverty line for undertaking various income-generating activities.

iii) **Sarva Siksha Abhiyan (SSA):** This is the programme aimed at providing educational opportunity to all the children including those deprived of schooling. The goals of SSA are to:

a) Enroll all children of 6-14 age in School/EGS (Education Guarantee Scheme) Centre/bridge course by 2005.

b) Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010.

c) Universal enrolment and retention by 2010.

d) Focus on elementary education of satisfactory quality with emphasis on education for life.

8.7.4 Measures to Overcome Gender Disparity

Some of the important measures aimed at reducing gender disparities are as follows (http://www. egyankosh.ac.in/bitstream/123456789/34921/1/Unit1.pdf).

Special Initiatives for Empowerment of Women: Government of India has taken special initiatives during the 9th and 10th Five Year Plans for empowerment of women. Recognising the fact that women have been socialized only to take a back seat in public life, affirmative action through deliberate strategies have been initiated to provide equal access to and control over factors contributing to such empowerment, particularly in the areas of health, education, information, life-long learning for self development, vocational skills, employment and income-generating opportunities, land and other forms of property including through inheritance, common property resources, credit, technology and markets, etc. To this effect, the newly elected women members and the women Chairpersons of Panchayats and the Local Bodies will be sensitized through the recently launched special training package to take the lead in ensuring that adequate funds/benefits flow towards the empowerment of women and the girl-child.

The Kishori Shakti Yojana (KSY) and Nutrition Programme for Adolescent Girls (NPAG): These two schemes are being implemented for the development of adolescent girls using the existing infrastructure of the Integrated Child Development Scheme (ICDS). KSY promotes self- development, nutrition and health status, literacy, numerical and vocational skills among girls in the 11-18 years age group. A new unified National Programme on Adolescent Girls, replacing the existing KSY and NPAG was launched by the Government of India.

Mid-Day Meal (MDM) Scheme: The Mid-Day Meal is the world's largest school feeding programme reaching out to about 12 crore children in over 12.65 lakh schools/EGS centres/Alternative and Innovation Education (AIE) Centres across the country (http://education.nic.in/elementary/mdm/ index.htm). The scheme is being implemented by all States/UTs. MDM scheme has helped in promoting school participation, preventing classroom hunger, instilling educational values and fostering social and gender equity.

The National Program for Education of Girls at the Elementary Level (NPEGEL): The NPEGEL, under the Sarva Shiksha Abhiyan (Education for All), provides additional components for education of girls from underprivileged/ disadvantaged sections of society, It is being implemented in Educationally Backward Blocks (EBS) where the level of rural female literacy is less than the national average and the gender gap is above the national average, as well as in blocks that have at least 5 per cent SC/ST population and where SC/ST female literacy is below 10 per cent.

Kasturba Gandhi Balika Vidyalaya (KGBV) Scheme: KGBV is a scheme launched in July 2004 for setting up residential schools at upper primary level for girls belonging predominantly to the SC, ST, OBC and minority communities. It is being implemented in educationally backward blocks of the country where female rural literacy is below that of national average and gender gap in literacy is above that of national average. The scheme provides for a minimum reservation of 75 per cent of the enrolment for girls from SC, ST, OBC or minority communities. For the remaining 25 per cent, priority is accorded to girls from families below poverty line.

The National Plan of Action for the Girl-Child: The National Plan of Action for the Girl-Child has been merged into the National Plan of Action for Children, 2005, which includes goals, objectives and strategies for the girl-child. The emphasis is on creating an enabling environment, increasing choices and promoting development through special opportunities. Equal rights in succession and inheritance, addressing persistent gender stereotyping and strengthening girls; self-esteem are important strategies. Besides ensuring equal opportunity for free and compulsory elementary education to all girls, it specifically seeks prohibition of sex-selective female foetecide and infanticide, elimination of child marriages, security and protection from abuse, exploitation, victimization and all other forms of violence, deprivation and neglect in the home, community and in access to services.

8.7.5 Major Comprehensive Drive to Reduce Disparities: Inclusive Growth

The Eleventh Plan gave a special impetus to several programmes aimed at building rural and urban infrastructure and providing basic services, with the objective of increasing inclusiveness and reducing poverty. Some of these programmes were new, while others represented augmenting the existing initiatives. Thirteen such flagship programmes are listed in Table below (http://indiamicrofinance.com/ wp-content/uploads/2011/09/12th-Plan-India-draft-approach.pdf).

Table 8.14: Flagship Development Programmes (Unit: Rs.Crore)

Sl. No.	Programme	Ministry/ Department	2007-08 Actual Expenditure	2011-12 BE	Total XIth Plan
1.	MGNREGA	Rural Development	12,661	40,000	156,301
2.	Indira Awas Yojana (IAY)	Rural Development	3,886	10,000	41,486
3.	National Social Assistance Programme (NSAP)	Rural Development	3,104	6,158	23,536
4.	Pradhan Mantri Gram Sadak Yojana (PMGSY)	Rural Development	6,500	20,000	65,002
5.	National Rural Health Mission (NRHM)	Health & Family Welfare	10,509	18,115	69,214
6.	ICDS	Women & Child Development	5,832	10,380	38,980
7.	Mid-Day Meal (MDM)	School Education & Literacy	5,832	10,380	38,602
8.	Sarva Siksha Abhiyan (SSA)	School Education & Literacy	11,477	21,000	77,576
9.	JNNURM	Urban Development	5,508	13,700	48,485
10.	Accelerated Irrigation Benefit Programme (AIBP) and Other water resources programme	Water Resources	5,446	12,650	46,622
11.	Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY)	Power	3,913	6,000	25,913
12.	Rajiv Gandhi Drinking Water Mission (Rural Drinking Water) – NRDWP and Total Sanitation Campaign (TSC)	Drinking Water Supply	7,320	11,000	46,722
13.	Rashtriya Krishi Vikas Yojana	Agriculture & Cooperation	1,200	7,811	18,550
Grand Total			**81,217**	**186,539**	**691,976**

Source: Planning Commission. 2011. *Draft – Faster, Sustainable and More Inclusive Growth: An Approach to the 12th Five Year Plan.* See http://indiamicrofinance. com/wp-content/uploads/2011/09/12th-Plan-India-draft-approach.pdf.

Most of these are Centrally-sponsored Schemes/programmes, which are implemented by State Government agencies, but are largely funded by the Central Government with a defined State Government share. The total expenditure on these schemes by the Central Government in 2011/12 (budget estimate) is Rs.188,573 crore, and the total expenditure during the Eleventh Plan period is

almost Rs.700,000 crore. As one would expect, the effectiveness of their implementation varies from State to State. Instances of misuse of funds are frequently reported in studies and press reports, and these are a legitimate source of concern that needs attention. However, it must be kept in mind that while instances of misuse or leakage present serious problems, they do not necessarily imply that the overall impact of the programme is not positive. For example, MGNREGA, which was started in 2006-07 and extended to cover the whole country during the Eleventh Plan, has seen several instances of misuse of funds, but it has also notched up a remarkable success. There is a proliferation of Centrally-sponsored Schemes over a period of years. This has led to poor implementation, duplication, lack of convergence and sub-optimal results. There is an urgent need to transform the system and sharply reduce the number of schemes. This will enable more focused and effective implementation. A Committee under Shri B. K. Chaturvedi, Member, Planning Commission, has been appointed to review the entire gamut of Centrally Sponsored Schemes and make recommendations for rationalization and consolidation leading to reduction in their number.

With a people-centred, demand-driven architecture, completely different from the earlier rural employment programmes, MGNREGA has directly led to the creation of 987 crore person-days of work since inception. In financial year 2010/11, MGNREGA provided employment to 5.45 crore households generating 253.68 crore person-days. It has also successfully raised the negotiating power of agricultural labour, resulting in higher agricultural wages, improved economic outcomes and resulted in reduction in distress migration. This is not to deny that with better project design implementation leakages could be greatly reduced; and the assets so created could make a much larger contribution to increase land productivity. Reforms in implementation of plan schemes are a priority and should receive focused attention in the Twelfth Plan. There is need for more flexibility in the design of the schemes to reflect the realities on ground across the States. Special provisions should be considered for encouraging innovation and special efforts to promote convergence at the level of implementation to prevent duplication and to create synergies that improve the quality of outcomes.

8.7.5.1 Inclusive Development: Role of Extension Education in Reducing Disparities

Government of India has made "inclusive growth" a key element of their policy in Eleventh Five Year Plan, stating as a goal "achieving a growth process in which people in different walks of life feel that they too benefit significantly from the process".

How a country may achieve a self-sustaining transition from traditional to industrial economics has been addressed by many contributions to development theory. Economic growth does not establish or suggest, however, an explicit cause-effect relationship between countries' rate of economic growth and the resulting poverty reduction, although policymakers often assume an implicit connection. One view is that growth is pro-poor only if the incomes of poor people grow faster than those of the population as a whole. An alternative position is that growth should be considered to be pro-poor as along as poor people also benefit in absolute terms, as reflected in some agreed poverty measures.

Development Policy Report of World Bank, 2006 reveals that inclusive growth is the indisputable way to reform the regional imbalances and strengthen economic gains. The DPR also reveals that the inclusive growth process should go towards the enhancement of the quality of basic services including education, power, health care and water supply for every individual across the country. The report also suggests that the stress should be given not only on the distribution of economic gains but also on empowering people in enjoying their social life and at creating employment opportunities.

Several studies suggest that there is a correlation between inclusive economic growth and the level of public expenditure on social development including education and health (Habito, 2009). Literacy is arguably the most significant factor in poverty reduction as it enhances employability. The role played by literacy has been found to be particularly notable by Ravallion and Datt (2002), who reported that nearly two-thirds of the differences between the elasticity of the head count index of poverty to non-farm output for Bihar and Kerala was attributable to the latter substantially higher initial literacy rate.

Inclusive Development and Education: The 86th amendment to the Constitution of India in 2009 makes education as a fundamental right. Education is universally recognized as a central component of human capital. The role of education as a contributor to economic growth and its impact on population control, life-expectancy, infant mortality, improving nutritional status and strengthening civil institutions is well recognised. Moreover, the social rates of returns to investments in all levels of education much exceed the long-term opportunity cost of capital. In normal course educated parents would send their children to schools. Where parents are not educated they may send their children to schools if there are enough incentives to attract and retain the children in schools. The Government of India and the United Nations (UN) recognized that certain sections of the population remain marginalized. Children who are marginalized by the formal education system are usually scheduled tribes, scheduled castes and working children, those belonging to minorities, disabled children and children in remote areas. Girls from these groups are severely marginalized.

Development programmes for industrial, scientific, agricultural and commerce growth could not be successful without an improvement of human resources. Education is the solution to many of the problems related to the economy and also the parameter for any inclusive growth. So, education had given first priority among national requirements and Indian government has taken many measures and also framed the educational policies accordingly and long back the University Grants Commission in its policy frame on Higher Education recognized extension as the third dimension of the institutions of higher education in addition to the two-fold dimension of teaching and research.

Role of extension education: In this context, extension education assumes greater importance in the context of tackling the issues of disparities in the changing world. There are many potential areas such as the following which provide enough scope for extension education to play its role in advancing the plans, schemes and programmes aimed at reducing the disparities: i) Increasing the efficiency in agricultural production; ii) Increasing the efficiency in processing, marketing, distribution and utilization of agricultural produce and other rural-based small-scale industrial products; iii) Conservation, development and use of natural

resources which are locally available; iv) Promotion of self-employment through effective farm and home management; v) Promotion of diversified means of earning for improving the quality of family-living; vi) Promotion of youth development; vii) leadership development in rural areas; viii) Integrated development of the backward communities; and ix) Promotion of public affairs/ welfare.

Extension education should thus lay greater emphasis on the most deprived and the marginalized in order to reduce various kinds of disparities in different aspects of development with a view to promote equality of distribution of benefits of different measures/programmes of Government with enhanced access to existing resources and facilities.

Check Your Progress

Notes: a) Space given below the question is for writing your answer.

b) Check your answer with the one given at the end of this unit under "Answers to 'Check Your Progress' Questions".

8) What are the various programmes implemented by the Government of India to overcome disparities?

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8.8 LET US SUM UP

Developmental disparities and marginalization have been the widely recognized issues. We have therefore highlighted the concept, significance, types and the causes of disparities. Since the disparities call for a strategy and measures for their reduction, we have also laid an emphasis on the strategy and measures followed in developing countries in general and the measures undertaken by India in particular for reducing the disparities as well as for promoting inclusive development of the marginalized.

8.9 ANSWERS TO 'CHECK YOUR PROGRESS' QUESTIONS

1) There are two main categories of indicators to measure economic development: i) Social, economic and political indicators, and ii) Indicators in terms of quality of life. Within these categories there are different approaches followed by the experts. UNRISD and Adelman and Morris approaches are the two major studies in the first category of indicators to measure economic development. The UNRISD (1970) approach has selected 16 core indicators (nine social and seven economic) and constructed a composite social development indexes to measure economic development. Adelman and Morris approach has classified 74 developing countries by taking 40 variables into consideration with the help of factor analysis technique. The approach has tried to examine the interdependence between social and political variables and the level of economic development. Under second category, there are two main approaches i.e. Physical Quality of Life Index of Morris (1979) and Human Development Index of United Nations Development Programme (1990). Physical Quality of Life Index has taken three variables — life expectancy, infant mortality and literacy — and constructed a simple composite index to measure economic development. By taking both economic and non-economic social indicators such as gains in literacy, schooling, health conditions and services, etc, the United Nations Development Programme has tried to construct a refinement of Human Development Index to measure development so as to give ranks. These indicators are useful in understanding the developmental disparities.

2) Disparity means the condition or fact of being unequal, as in age, rank or degree. For instance:

   - Age disparity – being young, middle-aged, old, etc.
   - Rank disparity – being a chaprasi, clerk, an officer, etc.
   - Degree of disparity — being poor, average, excellent (as in the condition of a car), or developed, developing, underdeveloped (as in status of a country), etc.

   Disparity and development are like two sides of a coin. Disparity in development creates bottlenecks to further development. The less the disparity, the greater will be the chances of development; and, the greater the disparity, the less will be the chances that development takes place. Thus, if the disparities widen beyond proportion, the deprived get excluded from developmental process as their participation in the process becomes marginal and get only fringe benefits of the overall development processes. Such phenomenon is true in the case of countries, communities and the individuals at the respective levels.

3) Broadly speaking, we can identify the following main types of disparities.

   i) Global disparities – Inter-regional and inter-country disparities

   ii) National disparities or Disparities in India

      - Inter-state and intra-state disparities
      - Rural-urban disparities

- Religious and caste disparities
- Gender disparities.

The gender disparities, of course, cut across all the other types of disparities.

4) Global disparity describes the disparities that exist between and among the nations and regions i.e. inter-country and inter-regional disparities. For example, socioeconomic disparity exists at the global level, and that is why countries are classified into two categories: developed and underdeveloped. There are countries which are in between these two categories which are referred to as developing countries. Each country is at a different level of development, which causes disparity among the countries. Some counties have been endowed with abundant resources, while there are countries that are extremely poor in resources. Resources are of various types: material resources, manpower resources, natural resources, and financial resources. Differences in the availability and utilization of these resources, by and large, cause disparity among the countries, and put them at different levels of development.

5) There are many causes of disparity. They are mainly as follows.

- Failures of Economic Growth
- Inequalities in Land Ownership
- Private Ownership of Industries, Trade and Buildings
- Inequalities in Professional Training
- Rapid Price Rise and Adverse Terms of Trade
- Poor Availability of Credit Facilities
- Urban Bias in Private Investment
- Role of the Government
- Conflicts and Displaced Persons

6) World Development Report 2000/2001 (UNICEF, 2009) proposed a strategy for attacking poverty in three ways:

i) Promoting opportunity;

ii) Facilitating empowerment; and

iii) Enhancing security.

Promoting opportunity implies steps to increase jobs, credit, roads, electricity, schools, water sanitation and health services. Facilitating empowerment requires creation of sound and responsive institutions for the benefit of the poor. Enhancing security implies reducing vulnerability to economic shocks, natural disasters, ill-health, disability and personal violence. This is an intrinsic part of enhancing well-being and encouraging investment in human capital and in higher-risk, and higher-return activities.

7) Important measures to reduce inequalities/disparities in developing countries are as follows.

- Rising productivity of small-scale agriculture.
- Land reforms and redistribution of land.

- Programmes for increasing employment opportunities.
- Strengthening and enhancing production of small-scale and informal sectors.
- Emphasising labour-intensive industrialization.
- Programmes for upliftment of the rural poor .
- Progressive tax policy.
- Sustained investment in people to enhance human capabilities.
- Subsidising goods and services.
- Providing infrastructure.
- Social security system.
- People's participation in development.
- Promoting accountability.

8) Different measures undertaken or programmes launched by the Government of India to reduce different types of disparities in India can be summed up as follows.

i) Measures/programmes undertaken to overcome inter-state disparities include the following.

- Western Ghats Development programme to improve and manage natural resources by including village panchayats and NGOs.
- Special Area Development progammes for the coastal regions.
- Backward region grant funds by merging the Rashtriya Sam Vikas Yojana.

ii) Measures/programmes undertaken to overcome rural-urban disparities include the following.

- The Swarnjayanti Gram Swarojgar Yojana Progreamme for group-lending to alleviate poverty.
- The Sampoorna Grameena Rojgar Yojana to provide additional wage employment in rural areas.
- National Rural Employment Guarantee Scheme to provide 100 days guaranteed employment for rural youth.

iii) Measures/programmes undertaken to overcome the inter-caste/ community disparity include the following.

- Sarva Siksha Abhiyan programme aimed to bridge all gender and social category gaps at primary stage by 2007 and at the elementary level.
- Integrated Child Development Services to provide health check up, immunization, referral services, supplementary feeding, pre-school education, and health and nutrition education through Anganwadi centres.
- Welfare and development of backward classes and other weaker sections, scheduled castes, scheduled tribes and minorities.

- The self-employment programmes, protection of civil rights acts, abolition of un- touchability Act, prevention of atrocities Act were implemented along with the reservations for employment.

iv) Measures/programmes undertaken to overcome gender-disparities include the following.

- Kishori Shakti Yojana (KSY) and Nutrition Programme for Adolescent Girls (NPAG). These two schemes were being implemented for the development of adolescent girls using the existing infrastructure of the Integrated Child Development Scheme (ICDS). KSY helps to promote self-development, nutrition and health status, literacy, numerical and vocational skills among girls in the 11-18 years age groups.
- Mid-Day Meal scheme is aimed to provide cooked mid-day meal with a nutritional content of 450 calories and 12 grams of proteins is served to children studying at primary level in government, government-aided and local body schools.
- Kasturba Gandhi Balika Vidyalaya (KGBV) scheme is for setting up residential schools at upper primary level for girls belonging to predominantly to the SC, ST, OBC and Minority communities.
- The Siksha Karmi Project (SKP) for qualitative omprovement of primary education in remote, arid and socio-economically backward villages.

In addition to that a separate National Plan of Action for the Girl-Child has been merged into the National Plan of Action for Children, 2005 for reducing gender disparities.

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